

THE

TRAVANCORE STATE MANUAL

Vol. I

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HIS HIGHNESS THE MAHARAJA.

PREFACE

Thirty two years have elapsed since the Travancore Government published a State Manual. The late Dewan Bahadur V. Nagam Aiya, the author of the book, was then the senior-most officer in the service, one whose deep knowledge and long experience of the country had often been requisitioned in the preparation of minutes and reports among which may be mentioned the Census Reports of 1881 and 1891. He had acted as Dewan several times. It took Nagam Aiya many years to collect the materials for the Manual. For the major portion of that period he was doing the work along with his official duties as Dewan Peishkar. Towards the close he was placed on special duty as full time State Manual Officer. The learned author spoke of the work as being 'of an encyclopaedic nature spread over a space of more than 1820 pages of letter-press to sav nothing of the continued strain, the anxious and unremitting attention or the huge preliminary studies it cost'. The present book covers more than 4,000 pages in four volumes.

When I was appointed Special Officer the idea of Government was merely to have the Manual "revised". But a more ambitious plan was soon adopted. The literature on the various subjects is now much more extensive than it was in 1906. Points of view have greatly changed. Several epochs in the history of South India in general, and that of Travancore and Malabar in particular, have been brought within the sphere of profitable research. New facts which establish the greatness of Travancore in the distant past and the continuity of its political development in thorough independence have been revealed. Theories which commanded approval have been discredited. In the course

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of my preliminary studies I found that a mere revision would not meet present-day requirements. In addressing the Government on the subject I pointed out :-- "In view of the fact that more than thirty years have elapsed after ·the compilation of the State Manual the very framework requires change. The large number of new laws passed and new institutions brought into working order, the radical changes in the administrative system effected during the last thirty years, the growth of social and other organisations, and the change in the points of view which have resulted from contemporary appreciation of new values, all these demand an adequate treatment". The real facts of the history of Travancore and the unique position of the State had also to be carefully ascertained and narrated in sufficient detail. The bulk of the book, I said, would therefore have to be re-written.

Seeing that a careful study of the old records in the archives of government would throw light on some of the unexplored regions of the History of Travancore, I requested permission to use the old documents in H. H. the Maharaja's Palace, the Huzur Central Vernacular Records, the Sri Padmanabhaswamy temple and other repositories of old cadjans and papers. On inspection of the record rooms it appeared to me that a methodical search would disclose a large volume of relevant materials which have long remained unused. In my letter dated 29th January 1937, addressed to the Government, I suggested the desirability of appointing a staff to classify the records, prepare an index, and make out copies of such of the documents as I might use with advantage. The Dewan, Sachivothama Sir C. P. Ramaswamy Aiyar, paid a visit to the Huzur Central Vernacular Records Office and the Sri Padmanabhaswamy temple to make a personal inspection. My proposal was sanctioned. In the Chief Secretary's letter on the subject addressed to the Financial

Secretary, copy of which was forwarded to me, he said that 'the Special Officer for the revision of the State Manual has brought to the notice of Government that if the large collections of valuable records preserved in the Mathilakam, the Palace, and the Central Vernacular Records are carefully sorted, listed, and indexed it would facilitate a comparative study of those records which would be of immense advantage in the revision of the State Manual besides being of permanent benefit to the State in many other ways'. A staff of clerks and scribes, thirty-five in all, was appointed to do the work under the direction of Mr. P. N. Kunjan Pillai, a young officer of high academic distinction and recognised proficiency in Malayalam, Sanskrit and Tamil in addition to English. He was, at the time of his appointment, working under me as a fulltime Assistant. I paid frequent visits to the Mathilakam and the Central Vernacular Records Office to keep myself in touch with what was being done. Though the main work of the staff was in matters other than the collection of materials for the State Manual they were able to discover numerous ancient documents of great historical value.

Some of the records, it may be observed, had been used by Dewan T. Madava Row, Shungoonny Menon and Nagam Aiya in the preparation of their accounts of the history of Travancore. Many were published by R. Mahadeva Aiyar, the compiler of the Travancore Land Revenue Manual. But a large number of documents still remained to be unearthed. Their discovery opened new vistas. It became imperative that I should re-examine many of the conclusions arrived at by the older writers. The examination disclosed that the warp and woof of the fabric had to be changed. Fairness required that I should rest the new views on materials newly discovered, taken along with those which had been available hitherto. Elaborate argument was found necessary in several cases. This was

rendered all the more necessary because the facts narrated in certain books published by authority in Travancore are being treated as admissions against interest on the strength of which writers seek to advance theories of the political subordination of Travancore to the ancient Cholas and the Pandyas, and after them to the Perumals of Mahodayapattanam and the kings of Vijayanagar and the Nayaks of Madura in the later periods. The assistance rendered by Travancore to the English East India Company to bring about peace in South India has not been given the prominence which it deserves.

Nor was the necessity of re-writing confined to the chapters on History, Legislation, Administration, and such like. The chapter on Geology in Nagam Aiya's State Manual was written before the organisation of a Geological Department in Travancore and was based solely on the observations of Dr. W. King and Dr. R. Bruce-Foote. The extended use of the microscope has led to great advance in deciphering the structure, composition, and characteristics of the different rocks. The Travancore State Geologists have, now for many years, been engaged in exploring the subject. The incorporation of new details demanded a change in the scheme of the chapter which it was impossible to effect without a complete re-writing. The chapters on Flora and Fauna also called for considerable alteration, extension and amplification. In the present book 245 pages are allotted to these two chapters as against 87 in the previous Manual.

The chapters on Language and Literature also demanded re-writing as the corresponding portion in the former Manual was not comprehensive. It had failed to narrate in sufficient detail the various forces which led to the development of the language and literature to their modern form. In the present account care has been taken to present the fundamental ideas and trace the different stages in

their growth with considerable fulness. In that scheme more prominence has been given to types of composition than to individual writers. The scope of the chapter on Hinduism had to be extended in view of the great Temple Entry Proclamation. The place of temples in the scheme of Hinduism as practised by the large majority of the people and the intimate connection that exists between the Devaswoms and the Government had to be explained at length.

The chapter on Christianity in Nagam Aiya's Manual was written by Mr. G. T. Mackenzie, a former British Resident in Travancore and Cochin. On a careful study of the subject it appeared to me that a fuller and more comprehensive account should be prepared. The early history of the Malabar church can alone explain the origin of the difference between the various sects. The starting point is the visit of St. Thomas to Malabar in 52 A. D. But as the older writers discredited the tradition it became necessary to examine the subject carefully. Repeated discussion with people of different persuasions and a close study of authoritative books and documents were essential preliminaries to the compilation of a proper account. The section on Islam had also to be re-written.

The scope of the chapter on caste had to be changed. In the preface to the previous State Manual the author said that 'the chapter on castes touched only the outer fringe' and that 'a whole volume ought to be devoted to castes alone.' The progress of ideas in Travancore and the breaking up of the barriers of caste during the last three decades obliged me to take a different view. We have reached a time in which the very mention of castes as depressed and inferior would create offence. It would even be illegal in view of the pronouncements made by Government on the subject. I had therefore to re-write the chapter to suit modern requirements, incorporating facts which are

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absolutely essential and eschewing those not strictly necessary, notwithstanding that they may not be without use to the student of ethnology and anthropology.

The economic conditions of the present day and the course of action followed by Government in encouraging agriculture, industry and trade are fundamentally different from what they were in 1906. A number of new Departments have come into being since then, each charged with its own share in nation-building activities. The conditions of agriculture have changed. New industries are being brought into existence. Labour organisations have taken the place of custom in the regulation of wages. The steam engine is playing a prominent part in providing energy, and the Government is devoting great attention to the supply of electric power with a view to foster cottage industries as well as to assist largescale production in factories. Joint stock companies and co-operative societies have altered the very basis of credit. All the chapters dealing with economic subjects had therefore to be written afresh.

The chapters dealing with Administration, Legislation, Local Government, Education, Public Health, had also to be written anew; for, the association of the representatives of the people in the work of Government and the rights and privileges granted to the Legislative assemblies, Municipal councils, Panchayat courts and Departmental committees have been so great that it was found absolutely impossible to retain the chapters of the older book. During the last several years, the members of the Legislature have been taken into the confidence of the Government in shaping policies and fixing the details of legislation and administration. Naturally the State Manual would be consulted as a source book of authentic information. In writing the former Manual the author's aim was 'to present to an utter stranger to Travancore such a picture of the land

and its people, its natural peculiarities, its origin, history and administration, its forests and animals, its conveniences for residence or travel, its agricultural, commercial, industrial, educational and economic activities, its ethnological, social and religious features as he may not himself be able to form by a thirty years' study or residence in it.' Probably the times did not require a different scope. But to-day there is no subject in Travancore; scientific, political, social, economic or religious which does not draw forth the attention of the whole population. The quest for precise scientific knowledge of the various subjects is gaining strength. Therefore a closer study and a more detailed narration were indispensable.

The very much larger volume of work which resulted from the change in the scheme of the Manual from what it was contemplated at the time of my appointment as Special Officer made it imperative that the time allowed for its preparation should be extended. The period of seven months originally sanctioned was extended to twenty nine months in the aggregate. The experience of Mysore is relevant to the subject. The first Mysore Gazetteer compiled by Mr. Lewis Rice was published in 1877. The same officer revised it in 1897. In the preface to the second edition he said: - Mysore in the interval (twenty years) has undergone such great and radical changes and so much has been added to our knowledge of its past by recent discoveries, that what appeared in the prospect a comparatively easy task has proved to be in reality one of considerable difficulty, and involving for its completion a longer period than was anticipated'. The work of compiling the latest Mysore Gazetteer was started in 1914. The Director of Archæological researches, and the Director of Statistics and Superintendent of Census operations were, successively in charge of it till 1924 when Mr. C. Hayavadana Rao who completed it began his work. The first volume was published in 1927 and the last in 1930.

In Travancore this is the first time a non-official has been entrusted with the compilation of a book of this character. My long association with the public life of the State in various capacities as member of various Committees, President of social, literary and political organisations, member of Municipal Councils, the Travancore Legislative Council and the old Sri Mulam Popular Assembly, the Standing-Finance Committee, and Deputy President of the Sri Mulam Assembly enabled me to start the work with certain initial advantages. During the whole of the period I had to work at high The Government considered it necessary to relieve me of my duties as a member of the teaching staff of His Highness the Maharaja's Law College that I might devote my whole time to the State Manual. As the work advanced I was also obliged to suspend my practice at the Bar. Vol. I went to press in June 1938.

Government was pleased to give me two full-time Assistants and five part-time Assistants besides a clerical staff. But on the expiry of four months one of the full-time Assistants, had to be relieved from duty on his appointment as Superintendent of the Huzur Central Vernacular Records. Mr. G. R. Pillai, the other full-time officer deputed to assist me in compiling the chapters on the 'economic' subjects worked in my office for five months. The part-time Assistants were not able to render me any substantial help. Perhaps they could find little leisure from their usual work in the Departments to which they are attached. One of them, however, Mr. K. Sivaramakrishna Sastri, of the department of Archaeology was of help in the interpretation of some of the Tamil inscriptions.

The book is in four volumes. The arrangement of the chapters is, in many respects, different from that adopted in the old Manual. Volume I contains twelve chapters: Travancore—A General View; Physical Features; Geology;

Flora; Fauna; People; Language; Literature; Religion—Hinduism; Christianity; Islam; and Castes and Tribes. Volume II deals with the History of Travancore from the earliest times to the present day. Volume III is devoted to economic subjects. The main topics dealt with therein are, General Economic Condition, Land Tenures, Forests, Agriculture, Irrigation, Fisheries, Means of Communication, Electric Power, Industries, Trade and Commerce, Investment and Credit, Joint Stock Companies and Co-operative Societies and Education. Volume IV contains the Gazetteer and a description of the working of the various Departments with such historical facts as show their development. Certain miscellaneous subjects are also treated therein. The Gazetteer has been made as full as possible.

The draft of the chapter on Physical Features was sent to the Conservator of Forests, the Chief Engineer, the Commissioner of Land Revenue and the Superintendent of Thus I had the advantage of having the details carefully verified. The portion bearing on Meteorology was prepared by Mr. V. Sivaramakrishna Aiyar, Professor of Physics, H. H. the Maharaja's College of Science. chapter on Geology was drafted by Mr. V. Mahadevan, the State Geologist. The major portion of the "Flora" chapter was drafted by Mr. N. K. B. Kurup, Economic Botanist of the Department of Agriculture. A portion of it was prepared by Messrs. J. Srinivasan and K. Narayana Aiyar of the College of Science. The whole chapter was perused by a committee consisting of the Conservator of Forests, the Director of Agriculture, and the Professor of Zoology, besides Messrs. Kurup, Srinivasan and Narayana Aiyar. The chapter on "Fauna" was prepared by Dr. K. S. Padmanabha Aiyar, Professor of Zoology and his Assistants. The proof-sheets of the chapters on Geology, Flora and Fauna and those of the portion of the chapter on Physical Features dealing with meteorology were corrected by the respective experts who drafted them.

The Census Report of 1931, by Rao Bahadur Rajyasevaniratha Dr. N. Kunjan Pillay has been largely indented upon for the chapter on People. The first draft was prepared by Mr. R. Sankara Aiyar, my Office Assistant. The chapter on Language was drafted by Mr. P. N. Kunjan Pillai. His scholarship and industry have been of very great advantage to me in writing the chapter on Malayalam Literature. The important religions of the State, Hinduism, Christianity and Islam are treated separately. In the chapter on Christianity care has been taken to trace the origin and growth of the different churches. A short account of the various 'creeds and practices' is given in the appendix to the chapter. My special thanks are due to the Heads of the several churches for their readiness in furnishing me with authoritative information for the preparation of the Appendix. The chapter on Castes and Tribes is based on several official reports and other authoritative books. Certain castes, which are either numerically large or distinguished by past achievements or present importance, have received a fuller treatment. Some castes are described to possess martial antecedents, but that does not mean others did not take part in military activities. The difference is one of degree.

A bibliography is added to each chapter. Diacritical marks are given to facilitate pronunciation. Though care has been taken to make the spelling of Indian proper names uniform, I am sorry to notice that in a few cases different forms of letters had been used in spelling the same word. In one or two instances the spelling followed in books, reports, Gazettes and other publications made by Government have been followed. For ex: 'th' has been used in cases in which 't' represents the same sound elsewhere.

From Mr. P. N. Kunjan Pillai I have received indefatigable 'assistance during a period of more than two years particularly in the compilation of Vol. II. Mr. G. R. Pillai

brought to bear upon his work a thorough knowledge of the subjects dealt with in Volume III. It is with great pleasure that I testify to his remarkable equipment and industry. The chapter on Land Tenures in Vol. III was drafted at my request by Mr. K. S. Narayana Aiyar, Advocate of the Travancore High Court. It shows, if I may say so, a harmonious combination of talent and industry. Dr. J. H. Cousins very kindly undertook to prepare the chapter on Art, Mr. R. V. Poduval, the account of Archaeology, Mr. K. Narayanan Nair that on Fisheries and Dr. M. K. Gopala Pillai and Mr. Rajagopal of the Public Health Department, the chapter on Public Health. I am thankful to them for their ready co-operation.

My thanks are also due to Mr. R. Sankara Aiyar, my Office Assistant who devoted to his work the most assiduous and careful attention. After he was relieved from my office, Government appointed him on my recommendation to correct the proofs. The clerical staff also has given me their whole-hearted service which I appreciate very much. G. Sivasankara Pillai and R. Kesavan Nair have been working very hard from the beginning. They have been of considerable assistance to me in the collection of statistical data and the taking down of useful notes. Sivasankara Pillai's services in the preparation of the Index have been invaluable. T. Jacob, the senior typist, had also very tight work which he did to my entire satisfaction.

My thanks are due to the management of the S. T. Reddiar and Sons, V. V. Press Branch, Trivandrum, for the neat get-up of the book, to the Director of Information and the staff of the Photographic Department for supplying me with copies of photographs; and the Superintendent of the Government Press for assistance in getting them printed and for the personal interest taken by him in supervising the binding.

Mr. C. P. Skrine, British Resident, Madras States, very kindly allowed me to use some of the old records in the Residency. I tender him my sincere thanks.

I am grateful to Sachivothama Sir C. P. Ramaswamy Aiyar who found time, in the midst of his official duties as Dewan, to peruse the drafts and suggest important points for study and presentation.

Above all, I take this opportunity to tender my loyal and respectful thanks to His Highness the Maharaja for the kind permission granted to me to use the valuable documents in the Palace Library. The deep interest which His Highness has been pleased to take in the progress of the work has been to me a great inspiration and encouragement.

Trivandrum, 20th Dec. 1938.

T. K. VELU PILLAI.

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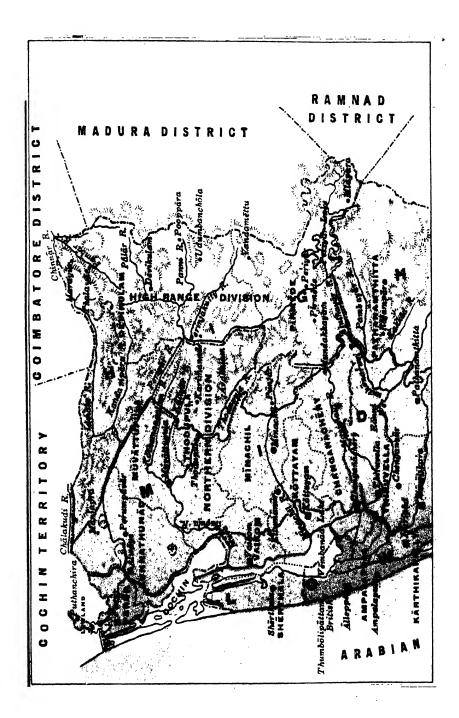
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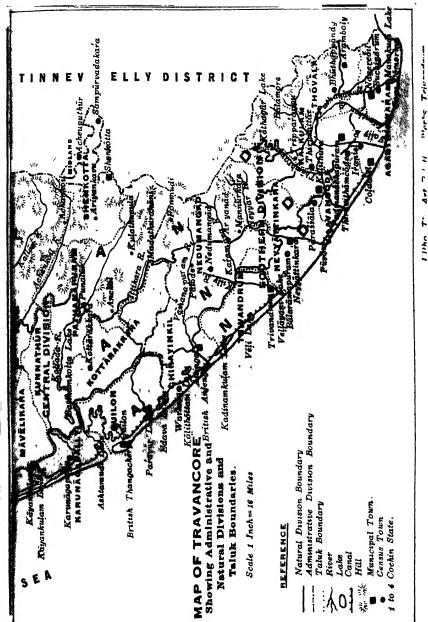
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THE

TRAVANCORE STATE MANUAL

CHAPTER I

TRAVANCORE—A GENERAL VIEW.

Travancore occupies a prominent place in the first

rank among the Indian States. There are states with larger area, larger revenues, and larger military The State: But no political unit in India forces. Its beauty and presents a picture of such continuous hisimportance. tory and cultural tradition, of substantial achievement and steady progress in the moral and material welfare of the The name Travancore is people as this ancient State. the Anglicized form of Thiru-vitham-kode or Śrīvalumkode. the abode of prosperity. Venād is a corruption of Vānavanad, the land of the celestials. As the state has been in existence from remote antiquity, it has come to be known by several other names each of which emphasises a particular fact of history or aspect of special interest. Thus 'Vanchidēśam' means the kingdom ruled over by the descendants of the ancient Chera kings who had their capital at

Travancore is richly endowed by nature with practically unlimited resources and has evolved a typical civilisation during a period of over two thousand years of recorded history. Indian poets of eminence have sung its praises, describing the beauty of its forests and rivers, the fragrance

Thiruvanchikkulam. 'Dharmarajyam' denotes the land of

good laws, piety, truth and charity.

of its sandal, the abundance of its pepper and its cardamoms, and the wealth of its coccnuts. The martial glory of its men and the refinement and charm of its women have evoked numberless tributes. The writings of foreign travellers are full of appreciations of the country and its people. "Here nature has spent upon the land her richest bounties; the sun fails not by day, the rain falls in due season and an eternal summer gilds the scene. Where the land is capable of cultivation, there is no denser population; where it is occupied by jungle, or backwater, or lagoon, there is no more fairy landscape."*

Lord Curzon is but one of the many British proconsuls and European travellers who have extolled the picturesqueness of Travancore. Sir M. E. Grant Duff described it as 'one of the fairest and most interesting realms that Asia has to show.' Lord Connemara, another Governor of Madras, compared it to Italy and called it a fairy Here nature is clad in her brightest and most inviting robes, the scenery is magnificent, the fields and gardens speak of plenty, and the dwellings of the people are substantial and comfortable. "Isolated by the towering mass of the Western Ghats, hidden away in a confusion of bays and creeks, hills, dense forests and groves of coconut palm, and situate in the southernmost corner of India, Travancore has not, till recently, attracted the attention that it deserves by reason of its wonderful and varied scenery and its cultural and political individuality; but thanks to the energetic and progressive policy of the present Ruler, attention is being more and more focussed on the State, and increasing numbers of tourists testify to its appeal."†

On the east are the Western Ghats which rise tier above tier, reaching to high altitudes in many places and throwing out spurs in picturesque diversity. The evergreen

^{*} Lord Curzon of Keddleston, Speech at Trivandrum, 1900.

[†] Sir C. P. Ramaswamy Aiyar, Broadcast at Bombay, 1936.

forests present an exuberant variety of tropical vegetation. "There is an infinite richness of plants, timbers and trees. There are manifold varieties of animals, birds and insects." The sylvan areas abounding in large and small game are the ideal land for the sportsman. The long coast line is more or less regular. There are, however, some good ports, Alleppey, Quilon, Trivandrum and Colachal being the more important. Parallel to the sea runs a bewitching continuity of lakes, backwaters and canals. The south-west and the north-east monsoons vie with each other in providing a liberal rainfall. The coastal regions command meteorological conditions of an agreeable character. The plateaux on the hills have a pleasant climate, temperate and bracing, generally delightful.

The area of the State falls within three natural divisions, the flat coast-strip or the lowlands, the mountainous region on the east or the highlands, and the intervening belt of hills and valleys or the midlands. "Broad stretches of alluvial rice-fields fringe the coast-strip and run up into the interior, gradually thinning out as they approach the highlands through which the rivers force their way," Trees krow in abundance in all parts of the State. The extensive coconut gardens throw a canopy of perpetual verdure over the habitations beneath. The palm, the Kalpavrksha of Kērala, gives the people a perennial crop and enables them to earn their livelihood with the minimum labour. The palmyra abounds in south Travancore. areca, mango, jack and tamarind are among the other trees which thrive in all parts of the country. A large variety of plantains adds to the beauty of the landscape and the earnings of the people. Pepper vines festoon the trees in almost every cultivated garden. Myriads of flowers bloom in their variety of colour and fragrance. The bulk of the arable lands, except those within the large forest reserves, has been brought under the plough or the spade. The High Range division which was nothing more than the haunt of wild

beasts and the seat of malaria is now studded with plantations and factories.

There are many towns of the modern type, commanding the facilities of access and the conveniences and comforts of life. Trivandrum, the capital of Towns. the State and the seat of the Ruling family, is a beautiful place with a port, a magnificent railway station, and an aerodrome. The great temple of Śrī Padmanābhaswamy, the palaces of His Highness the Maharaja, particularly the Kaudiyar Palace, and a large number of public buildings add to the beauty of the capital city. Nagercoil in the south is a town of rising importance. Quilon, forty-four miles north of Trivandrum, has maintained its commercial reputation from the days of the Phoenicians and the Romans. Fed by the Chinese trade it was regarded by Ibn Batuta in the fourteenth century, as one of the five chief ports which he had seen in the course of his travels during a period of twenty-four years. Further north lies busy Alleppey, the chief emporium of Travancore, situated in a large expanse of cultivated land, and commanding a system of canals and a road-service. It is the Venice of Travancore, the gondolas plying in all directions. Kottayam is another important town to the north-east of Alleppey. It is the key to the High Ranges, the meeting point of a system of roads and waterways through which the tea, rubber and other products of the hill-country flow into the Alleppey port ready for shipment. Pirmede and Munnar, the centres of the planting industry, are neat little towns in the High Ranges, endowed with the advantages of a temperate climate. Chitrapuram, the headquarters of the Pallivasal Hydro-Electric Project, is fast rising in importance by its association with the name of His Highness the Mahārāja as well as its great opportunities and high potentialities. Muthukkulivayal and Ponmudi on the hills in the south are two important sanatoria. Alwaye, on the bank of the Periyar and Aranmulay on the bank of the Pampa are two health resorts in the summer season. Kovalam and Varkalai are delightful sea-side resorts within easy distance of Trivandrum, the capital city.

In the plain country there are eighteen towns with municipal councils to administer their civic affairs. There are also many famous places of Hindu pilgrimage, the most important among them being Cape Comorin, Trivandrum, Thiruvattar, Janardhanam (Varkalai), Ampalapulai, Ettumānūr and Vaikom. Some of the most ancient Christian churches in India, Varāpula, Niraņam and Kottayam, are also in Travancore. Cape Comorin, the Land's End of India, is famous in song and story.

Travancore is rich in her natural resources. Shecommands inexhaustible wealth in the vegetable, animal and mineral kingdoms. Besides the culti-Natural Resources. vated and cultivable lands the State possesses two thousand four hundred square miles of thick forest. There are in it 582 varieties of timber trees and 3,538 other plants, many of which are of great economic value. Of the valuable trees, teak and blackwood are the most prominent. Sandalwood and ebony are also found in certain places. There is an unlimited supply of soft wood, besides reeds and bamboos, which may be used with advantage in the manufacture of paper, card-board, and artificial silk. It has been calculated that twenty-five thousand tons of reeds may be extracted annually from the forests of the State.

The coconut tree provides the raw materials for many kinds of manufactured goods for export as well as local consumption. Travancore copra is well-Coconut. known in the markets of the world for its high quality. The State commands a prominent portion of the world's trade in coir. But it is not on account of copra and

coir alone that the coconut is important to the Travancore agriculturist. Every part of the coconut palm, from the root to the fruit, has its uses. More than 25 per cent. of the total cultivated area in Travancore is under coconut. Not less than 30 per cent. of the total exports and nearly 50 per cent. if tea and rubber are excluded, are the produce of the coconut tree. Twenty five per cent. of the land revenue of the State and 50 per cent. of the customs collections are derived from the produce of the coconut tree, copra, oil and coir. The coconut tree is thus the *Kalpa Vriksha*, the giver of all one needs. The palmyrah is another palm with uses more or less similar.

The hills produce tea and rubber in large quantities. Tea now occupies nearly seventy seven thousand acres which yield more tea than all the other tea-grow-Other products. ing districts in southern India put together. The exceptionally fine quality of the tea produced in Travancore is largely due to the fact that most of the estates are in the high tablelands in the mountainous tracts. Rubber is grown on about hundred thousand acres in various parts of the country. The pioneer plantation in Travancore was opened in the year 1899 under the command of His Highness Śrī Mūlam Thirunāl Mahārāja. A very large quantity of rubber, tea, pepper, ginger, turmeric and cardamom are exported annually. It is believed that Travancore supplies 80 per cent. of the world's supply of cardamoms. Among the fruits the most common are the plantains, bananas. jacks, mangoes, pine-apples and cashews. But oranges, grapes, limes, pomegranates, sapodillas, rose-apples and mangosteens can be grown with profit. Fruit-canning is not attempted on a commercial scale. But the climate and the conditions of labour augur well for the success of efforts in that direction.

The fisheries of Travancore are of considerable importance. Though deep-sea fishing has not yet been tried,

the annual catch is not less than that of any of the important fishing countries of the world. Fisheries etc. The number of people engaged in the fishing industry is proportionately more than twelve times the proportion in countries like England and Germany. The annual yield is more than 90,000 tons, a quantity which is equal to the catch in Sweden and Denmark with all their improved facilities for deep-sea fishing. It is also instructive to note that the yield in Greece, Belgium and Australia amounts annually to a little over 40,000 tons. The Travancore catch is nearly one-fourth of the whole of that of the Indian Peninsula. The value of the annual catch is estimated to be rupees one hundred and twenty five lakhs. The fish caught in Travancore have a special and superior taste which is well-known and highly commended throughout the customer countries. The industry is bound to expand with the increasing facilities for cold-storage and canning. The peculiar advantage of Travancore, so far as its fisheries are concerned, consists in the position of the Wadger Bank, "the richest fishing ground in the Indian Ocean, one of the important ones in the world". The inland fisheries are equally rich, the yield per acre being not inferior to that of any piece of water in any part of the world.

Bee-keeping promises great potentialities in this land of flowering trees, shrubs and vines. Poultry-farming is becoming popular through the exertions of the Young Men's Christian Association at the Mārtāndom Rural Reconstruction Centre and in other parts of the State. Travancore is also famous for its lace and ivory works, its carving and its carpentry.

The mineral wealth of Travancore is striking in its variety. The kaolin deposits are some of the finest in existence and is being used in ceramic manufactures, the cruder kind supplying the material for making tiles. Kaolin is also useful as a

sizing material for cloth and a loader and filler for paper. Graphite, mica, and magnetite occur in certain places. Other valuable minerals found in quantities ensuring commercial success are monazite, ilmenite, zircon and silliminite. They occur in the sands in certain parts of the coast and are exported in large quantities. The raw materials available in abundance were being exported to other countries. This is due to the fact that there is no coal or mineral oil to provide the necessary energy for large industrial plants. But the Government of His Highness the Mahārāja Śrī Chithira Thirunal has made ample compensation by embarking on the construction of hydro-electric works on a very large scale. There are many rivers in Travancore with an adequate supply of water and sufficient plunge. The Hydro-Electric Scheme is expected to result in the building up of various industrial projects like bleaching, paper and rubber factories, and a number of textile and other industries.

The people are of many races and many creeds. "There are more people in Travancore than in the Irish Free State and Northern Ireland combined, The People. than in Norway and in all but four of the Central and South American States: while only five of the States comprising the United States of America hold a larger population". Ceylon and Travancore have the same number of inhabitants. Hindus of the purest stock, the exclusive Nampūtiri, and the proud Nāyar, live in amity and mutual confidence. The Tamil Brahmans occupy a position of influence. The enterprising Ilavas and the industrious Nadars have attained to a prominent position. Pulayas and Parayas, the descendants of the aboriginal tribes, are again coming to their own. No Indian state or province contains more Christians than Travancore, Nowhere in the whole world is a State ruled by a non-Christian monarch which has such a large Christian population as Travancore. This community which has been growing from the time of St. Thomas is large in numbers and prominent in wealth, industry and trade. The Muhammadans form 6.9 per cent. of the total population. Thus Travancore presents a diversity of races and religions. In the fostering shade of an uninterrupted toleration rarely paralleled in the history of the world, the followers of different faiths have lived here and pursued their moral and material welfare for centuries. Despite differences in caste and faith the people are accustomed to work together in all matters of general public interest. "Possibly there is no part of India so given up to public meetings, resolutions, representations, deputations as Travancore. In all these activities the newspapers and periodicals, whether as vehicles for the expression of views or as actual participants in movements, are vigorously engaged".* This helps the advancement of knowledge and promotes solidarity of interests among the various sections the people.

It is not merely its fundamental benignity of nature, or the variety of its races and creeds which constitute the claim of Travancore to its prominent The ruling dynasty descendants rank among the Indian States. It is of the ancient Cheras the oldest of them all with traditions. spreading over twenty centuries of continuous history and acknowledged importance. There are certain titles of a peculiar character which bind the Ruler and the people in mutual regard, of a benevolent love on the one side and loyalty on the other. The Hindus feel that their ideals and civilisation have remained intact through the centuries under the fostering care of royalty from the ancient times of Chera hegemony in South India. The Christians are grateful for the continuous stream of royal benevolence which nurtured their faith from the landing of the early

M. E. Watts, in the Asiatic Review, Vol. XXVI, pp. 231-232.

batches of missionaries and merchants from Baghdad, Nineveh and Jerusalem. The Muslims likewise remember with gratitude their entertainment and accommodation in Travançore in the true spirit of cosmopolitan brotherhood long before the formation of states which are professedly Muhammadan in origin and associations.

The rulers of Travancore trace their descent from the great dynasty of Chera kings whose exploits are recorded in the old literary monuments of India, the Ithihāsas and the Puranas and the works of the Sangam period of ancient Tamil literature. They have a long and continuous history beginning from a period earlier than the commencement of the Christian era. Tradition avers that one of the Chera kings anointed his son Vīra Kerala Varma as King of Venad investing him with the right of wearing a crown and performing the coronation ceremonies of Thulabharam and Padmagarbham. One of his descendants. Vira Mārihānda Varma, was crowned king as Kulaśēkhara Perumal in the Kali year 3831.* The Maharaias of Travancore have always been regarded as belonging to the original Chēra stock and they have all along regarded themselves as the representatives of that ancient line. A conclusive proof of their bona-fides is afforded by the established practice that in certain important religious ceremonies in the temple of Sri Padmanabha—ceremonies performed for the acquisition of spiritual merit and in the interests of the prosperity of the State-prayers are offered on behalf of the Maharaja mentioned by name as a Chera king. Kulasēkhara Alwar, one of the early kings of the Vanchi ruling family, used the significant title Kēralachūdāmani in a Sanskrit drama of his own composition, the Thanathi Samvaranam. Kēraļa and Chēra sometimes denote the same country, the former name being the Sanskrit form of the latter.

^{*} History of Travencore, Pachu Müthathu, tp. 16.

The Chēra descent of the Mahārājas of Travancore is warranted by the indisputable evidence of inscriptions discovered in various parts of south India. In the seventh century A. D. Arikësari Maravarman, the Pandya king, invaded Köttär which, according to Nākkirār, the learned commentator of the Akapporul, was in the territory of the Chēras. A later inscription, one of Paranthaka Pandya, (12th century A. D.) discovered at Cape Comorin, makes specific mention of the Chera king of Travancore. The name of Řavi Varma Kulašekhara who reigned over Travancore in the early part of the fourteenth century is mentioned in lithic records found in various places in south India. The inscriptions discovered in the Arulala Perumal Koil at Śrīrangam and Viruthanīswar, edited by Keilhorn and Hultczh, and another record found at the Valivaśāla temple, Trivandrum, deciphered by Gopinātha Rao, bear testimony not only to his conquests but also to his dynasty. The Poonamallee inscription states that this "Chēra king" defeated Sundara Pāndya. The "Ankuśa", the elephant's goad—the Chēra emblem--which surmounts the Pandyan fish on the right margin of the record indicates that the conqueror Ravi Varma was a Chēra,* Ravi Varma took pride in describing himself as of the Kupaka dynasty and the lord of Quilon, in a Sankrit drama of his own composition, the Pradyumna Abhyudayam.

Udaya Mārthānda Varma, a later king of Travancore (1382—1444 A. D.), prefixed the word 'Chēra' to his name. This is borne out by the chronicles in the Śrī Padmanābhaswāmy temple in one of which is an entry that king Chēra Udaya Mārthānda Varma performed the ceremonies connected with the assumption of the title of Chēramān. One of the favourite places of residence of the former rulers of Travancore, Chēramahādēvi (Śermādēvi) beyond the Ghats commemorates its association with the Chēra dynasty. Events of Vijayanagar history also lend their support.

^{*} The Pandyan Kingdom, K. A. Neelakanta Sastri, p. 212.

Rājanāthakavi, the court poet of the emperor Atchuthafāya (16th century), used the term Chēra and Thiruvaṭi as interchangeable.* Thiruvaṭi is admittedly a title used by rulers of Travancore through many centuries. Thiruvaṭidēśam and Vēṇāḍ denote the same country. Vēṇāḍ is derived from Vānavanāḍ, the country of the Vānavan. The title Vānavan denoted the Chēra king in ancient Tamiļ literature.† Mahārāja Ŕāma Varma who ruled over Travancore in the eighteenth century, a great scholar with a judicial cast of mind, deliberately called himself a Chēra in one of his treatises.‡ Thus from the earliest times the continuity of Chēra descent has been kept up and its memory cherished with pride.

The direct evidence on the point furnished by lithic records, chronicles and literary compositions is supported by circumstantial evidence of unimpeachable value. One of the most important titles of the rulers of Travancore is Vanchipāla, the protector of the land of Vanchi. Vanchi was the capital of the Chera kings even so early as the time of Senkuttuvan. In Tamil works of acknowledged antiquity the Chēra kings are called 'Vanchi vēndans.' No ruling family in Kēraļa has ever used the title Vanchipāla at any time except that of Travancore. It is clear from the foregoing facts that the Mahārāja of Travancore is the sole representative of the ancient Chēra line, one of the triarchy of great powers which ruled over South India in ancient times. The succession has been uninterrupted.

Their achievements of the kings of Travancore shed lustre on the pages of history. The Chēra king is mentioned in the Mahābhāratha as having participated in the battle of Kurukshēthra in the dynastic struggle between the Pāṇḍavas

^{*} Canto IV, Atchutharaya Vijayam, Rajanathakavi. See also sources of Vijayanagar History, Dr. Krishnaswamy Iyengar, pp. 162—164.

[†] Puranānūru and Šilappadikāram.

[†] Bālafāmabhafatham.

and the Kauravas more than three thousand years before Christ. Perinchöttu Udavan Cheral Atan is said to have assisted the combatants in their commissariat arrangements by providing food, the most important of the sinews of war.* Imaya Varamban Nedum Chēral Atan conquered seven kings and annexed their territories to his kingdom. He is praised as having imprinted his tow on the slope of the Himalayas. Senkuttuvar, the Chera king who reigned in the second century of the Christian Era, is stated to have carried his victorious arms to north India. The seas were also under his sway. His deep learning, his patronage of letters, and his extraordinary munificence were sung by the great Dravidian poets of the Sangam period. In the third century A. D. the Chefas won a victory over the combined armies of the Cholas and the Pandyas.† The Kalabhra interregnum which weakened the Pandyas left the Chēras free to pursue their path of ambition. When Arikesari Māravarman, the Pāndyan king, invaded Travancore in the seventh century, it was able to maintain its independence. The attempt of Paranthaka Chola and his successors to establish their authority was not more successful. Not only were the kings of Travancore able to maintain their territories intact, but they were also strong enough to extend their protection to their neighbours, the Aay kings who were frequently the victims of Pandya and Chola aggressions. In the beginning of the tenth century the Pandyan king who was defeated by the Cholas and forced to flee to Caylon was obliged to seek asylum in Travancore, which was readily granted.

Ŕavi Varma Kulaśēkhara (1929—1313 A. D.) led his mighty army across the Ghats, subdued the Pandyas and the Cholas, drove away the northern invaders and crowned himself emperor of south India. He is described in several lithic records as a man of great courage and personal virtue,

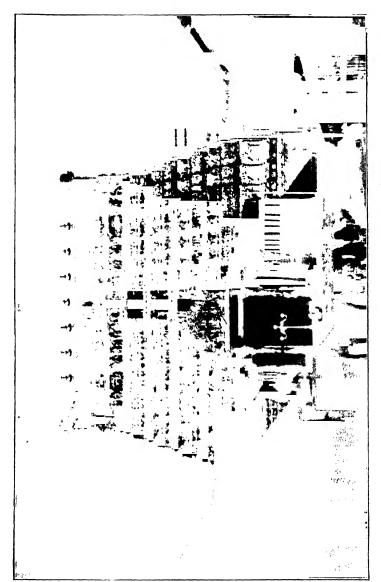
History of the Tamils, P. T. Srinivāsa Iyengār. The Cera Kings of the Sangam Period, K. G. Sesha Iyer, p. 38.

the embodiment of truth and justice, the patron of arts and letters, the shining light of the Lunar dynasty, the lord of Kupaka and Quilon, the suzerain of Kēraļa, and above all, the devotee of Śiī Padmanābha, the tutelary ceity of the ruling family of Travancore.

In the first quarter of the 16th century Bhuthala Vira Udaya Mārthānda Varma successfully resisted the invasion from Vijayanagar. Some years later Unni Kērala Varma gained a victory over Vittala, the Vijayanagar general, at Köttar. The armies of the Nayaks of Madura were more than once defeated by the Travancoreans. Marthanda Varma the Great and his general Rama Iyen succeeded in driving the Dutch out of Malabar and establishing the rudiments of political order which proved in a short time to be of inestimable benefit to the peace and culture of Kerala. Under the command of Maharaja Kama Varma, Aiyappan Mārthānda Pillai and D'Lannoy saved Cochin from being annexed by the Zamorin of Calicut. Later, in the same Mahārāja's reign, the Travancore army defeated the mighty forces of Tippu Sultan and made him flee for his life. The Travancore contingents, mobilised and directed by Dewan Kēśava Pillai, did immense service to the English East India Company in their struggle for supremacy in South India. The Mahārāja gave asylum to thousands of fugitives from Malabar and enabled them to save their lives and their honour.

The ideals of kingship in Travancore were nourished on the laws of Dharma as expounded in the Dharmasastras, Upanishads, Ithihasas and Puranas. In recent times they have been enriched by the political ideals of Great Britain and the West. They have been simple in their ways, rigid in their personal economy, tolerant in their attitude to all creeds, kindly to the

depressed, and sympathetic to the afflicted. In the fifteenth century Sakalakala Marthanda Varma, a Travancore



Srı Padmanabha Swamı Temple, Front View.

king, gave his protection to the low-caste weavers of Paraśurāma Perumtheruvu in south Travancore and permitted them to follow their religious worship and celebrate their festivals unmolested by the people of the higher exclusive castes. They were also allowed to use the public wells and tanks.

The Mahārājas of Travancore venerate their own religion and adhere to the eternal principles of Hinduism. But their toleration for other forms of Religious toleration. faith has not been less common or less genuine. The spread of Christianity in Travancore was facilitated by the generous attitude of the ruling family. Tradition maintains that Christianity was introduced into Malabar by no less a person than the Apostle St. Thomas in the first century after Christ. From that day to this Christians have found protection and encouragement at the hands of the ruling family of Travancore. It is no small credit to the rulers and the subjects that religious persecution is unknown in the annals of the State. The importance of this fact can be adequately appreciated only when it is remembered that Christianity was obliged to wade through sufferings and blood for many centuries in Europe before it was able to give a definite shape to the idea of religious toleration, and realise the necessity of adjustment of differences between the different sections which follow the faith. The recrudescense of intolerant attitude towards the Jews in some of the most civilised countries in Europe at the present day furnishes a convenient background upon which the light of the tolerant policy pursued by Travancore from the beginnings of the history of Christian evangelisation may fall with advantage. The policy, which was as spontaneous as it was wise, was extended by the rulers of Travancore to the votaries of all forms of religious faith.

In the ninth century A.D. Aiyan Atikal Thiruvatikal. king of Vēṇāḍ, issued a copper plate grant to Maruwān Sāpir Iso conferring upon the authorities of the Theresa Church at Quilon certain important rights and privileges. In the seventeenth century Unni Kērala Varma exempted the Christians of Kumari Muttam from some of the incidences of taxation, and permitted the clergy to levy a cess on boats which plied in the neighbouring waters enabling them to utilise the collections for the benefit of the church. About the same time St. Francis Xavier was able to found forty-five churches in Travancore within the space of less than two years. Mārthānda Varma the great (1729-1758 A.D.) gave tax-free lands to the Varapula church. His successor Mahārāja Karthika Thirunal paid a fixed allowance to defray the expenses of providing lamps in that church. The same Mahārāja met the expenses of building the Udayagiri church at the request of D'Lannoy and granted a salary of one hundred fanams to the vicar. Fra Bartolomew records that the Maharaja "took such measures that all the grievances of the Malabar Christians were redressed in the kindest manner". They were permitted to be governed by their own bishops in civil as well as in ecclesiastical matters, and encouraged to persevere in what they considered the chosen path of religious emancipation. The sirker officials often assisted the Christian priests in pressing their demands upon the parishioners and even adopted coercive methods to collect the amounts due. Exemption from payment of customs duty was also allowed on articles imported from western countries for the use of the missions. The people were equally cosmopolitan and generous; many were the instances in which aristocratic Hindus of the Savarna castes. Nampūthiris and Nāyars, granted land gratis for the building of churches and chapels.

The religious toleration of the rulers of Travancore was well-known even in the countries of Europe. In 1774 the Pope conveyed his warm thanks to Mahārāja

Rāma Varma Kārthika Thirunāl for the kindness shown by the latter to the members of the Catho ic church residing in Travancore. Recently His Holiness the Pope acknowledged this generous attitude of the Ruling family when His Highness paid a visit to His Holiness in the Vatican. It was a rejuvenation of long-standing confidence.

This attitude of the rulers of Travancore towards the Christians may be better appreciated when contrasted with the treatment meted out to them elsewhere by other rulers. On the other side of the Ghats the Kilavan Setupati of Rāmnād once ordered the destruction of all churches in his kingdom. John De Britto the missionary had to suffer martyrdom. His head and limbs were cut off and hung up as a warning to all Christians. "Burial was denied to his mutilated remains which were given to the birds of the air and the beasts of the field".* The king of Tanjore persecuted the Christians in his own territory and induced his neighbours to do likewise. On one occasion all the missionaries were banished from Trichinōpoly.† But in Travancore it was all kindness, sympathy and encouragement.

There is a disposition on the part of certain writers to make it appear that if the Mahārājas of Travancore rendered any assistance to Christians it was due to the influence of the Portuguese and the Dutch in the earlier days, and to the pressure of the British Government in the later period. ‡ This view proceeds from a fundamental misconception. The Portuguese never exercised any political authority in Travancore. Their desire was only to cajole

^{*} The Madura Country, Nelson, p. 220.

[†] See History of the Nayaks of Madura, Madras University Historical Series.

[†] This is the view taken by C. M. Agur in his Church History of Travancore.

the rulers and secure trading rights in respect of their favourite commodities. Nor were the Dutch in any better position so far as Travancore was concerned. Many were the battles in which they sustained defeat at the hands of King Martanda Varma. The peace of Mavelikara (1756) signed by them had a definite clause that Martanda Varma might attack any ruler of Malabar as he chose. Fear of the Mahārāja of Travancore persuaded them to abandon even their firm and faithful ally, the Raja of Cochin, notwithstanding his appeals. The counsel proceeding from the Dutch could not therefore have had any influence over the rulers of Travancore as regards the encouragement to be given to Christianity. It may also be remembered that far from being helpful to the Catholics, the Dutch annoyed the missionaries and behaved tyrannically to the converted Paravas on the Madura and Tinnevelly coasts. * They burnt down the splendid library of the Jesuits in Cochin. The theory of Portuguese and Dutch support in Travancore is nothing more than a myth.

Writers on the subject frequently proceed on the erroneous supposition that in the dealings of eastern monarchs with the merchants and missionaries from the west, they were actuated by a sense of inferiority. The argument is an anachronism. The idea of "the great powers of Europe" did not sway the mind of the east in those days. The westerners were known as traders and not as conquerors. They were generally treated as petitioners and not as masters. When the Fransiscan missionaries in Japan threatened that the Spaniards would find it easy to conquer Japan, Hideyoshi gave his answer by ordering that their noses and ears should be cut off and the victims paraded through the streets of Tokyo and crucified in public. Iyeyasu, his successor, distinctly stated that "so long as the sun warms the earth, let no Christian be so as to come to Japan, and let all know that if King Philip himself, or even the very God

^{*} The Madura country, p. 227.

of the Christians, or the Great Buddha contravened this prohibition, they shall pay for it with their heads". When Van Imhoff threatened to invade the territories of Travancore, Mahāfāja Mārtānḍa Varma gave an effective reply that he would invade Holland in case they misbehaved in Malabar. The difference lies in the fact that the Mahāfāja took the doughty attitude when the Dutch threatened him with an invasion for political and commercial reasons as distinguished from demanding concessions to the Christians. The policy of religious toleration was therefore not due to want of strength but from a perception of the justice and soundness of the principle.

The story of the British Government assisting the church in those early days is equally unsustainable. The argument appears to be that a protected British Government prince is generally obliged to lend his not evangelical. support to the programme of Christian Christianity is the religion of the evangelisation as Paramount power. But the idea of paramountcy is of comparatively recent origin. The history of the earlier transactions of the English East India Company disproves the contention. In the closing years of the eighteenth century and the opening ones of the nineteenth, conciliation of Indian sentiment was an acknowledged plank in the programme of British rule. "Half a century ago". said Kaye in 1859, "when the question of political supremacy was yet unsettled, our Government in its dealings with the people of the soil thought it best for its own safety to be openly of no religion ".* He added, "We made much open display of our reverence for their institutions by attendance at their festivals; turning out our troops to give additional effect to the show; firing salutes in honour of their high-days and holidays; and sanctioning, nay, promoting the prayers and invocations of the Brahmans to

^{*} John William Kaye, History of Christianity in India, p. 386.

propitiate the deities for a good harvest or a good trade".* The Court of Directors refused to give sanction to evangelisation until the Charter Act of 1833. Thus the East India Company could not have used their influence to wrest concessions from the rulers of Travancore in favour of Christianity. The logic of present-day facts must therefore be abandoned. The toleration extended to the followers of Christianity and Islam by the rulers of Travancore was the result of genuine benevolence of heart.

It is this cosmopolitanism of outlook and the respect for the plighted word that has strengthened the bonds between Travancore and the British Crown. Alliance with The history of the alliance is creditable Britain. to both parties. It had its first beginnings in 1644 A.D. when the king of Travancore, Unni Kērala Varma, permitted the East India Company to build a factory at Viliniam eight miles to the south of Trivandrum. That was many years before the Company got the island of Bombay from King Charles II, and many more before Job Charnock began to entertain dreams of securing Calcutta for his masters. In 1684 the Rani of Attingal granted a plot of land to the Company at Anjengo which soon became a prominent place of trade, second only to Bombay. In 1726 Prince Martanda Varma entered into "league and friendship" with the English. He conquered kingdom after kingdom, brought order out of chaos in Malabar politics, and established his authority on the solid foundations of military efficiency and social order. The faith of that king, the maker of modern Travancore, in British friendship was so great that in the last moments of his life. he advised his nephew and successor "to maintain above all the friendship existing between that Honourable Association and Travancore and to repose in them full confidence".†

^{*} John William Kaye, History of Christianity in India, p. 389.

[†] History of Travancore, by Shungoonny Menon, p. 175.

That nephew, Mahārāja Rāma Varma, who is known to history as Dharma Raja, rendered valuable assistance to the English in establishing their supremacy in South India, and received, in his turn, their valuable assistance in stemming the invasion of Travancore by Tippu Sultan of Mysore. In 1795 was concluded a treaty of permanent alliance. That alliance was the result of a mutual appreciation of the strength and prestige of both parties. It was not an arrangement between a civilised nation on the one side, and an ill-organised, impotent and ill-governed people on the other. The East India Company was at that time striving to establish the rudiments of order in lands which were becoming their territories. But Travancore had even then an efficient government, a wise system of laws, a national sentiment, and a strong feeling of loyalty to its king. In fact the administration of public affairs in this State was more efficient than that of any other state or political division in India.

The work of the two Mahārājas, Mārtānda Varma and Rama Varma, who brought Travancore to that high order of efficiency merits narration in Two great rulers. some detail. Both of them looked upon their exalted office as a trust for the benefit of their subjects. They looked forward, they strained their eyes to visualise a greater and more glorious Travancore. friendship of the British Government was to them a valuable asset. But it has to be recognised that the governance of the country was already on a sound footing before the commencement of the relationship with the East India Company. The programme was designed to meet all the requirements of material and moral progress. All the avenues of improvement were pursued with devotion. The problem of food was tackled by them in a manner worthy of the most civilised administrations of modern times.

New lands were brought under cultivation. The claims of irrigation received special attention. Martanda Varma's edicts on the subject of providing suitable facilities for agriculture, issued between 1729 and 1758 A.D., fill several pages in the Travancore Land Revenue Manual.* When the Ponmana irrigation canal was being constructed, the Mahārāja supervised the work in person from morning till evening.† To support the statesman's wisdom with God's grace, the Mahārāja made offerings to temples.

His successor, Mahārāja Rāma Varma, built a magnificent superstructure on the foundations which were so well and truly laid. The distractions caused by Tippu's invasion and the financial stringency which ensued did not prevent the expenditure of adequate sums of money for the protection of the agricultural classes. The officials of every village were ordered to inspect all lands which suffered damage by the breach of tanks and canals and the accumulation of sand which rendered them unfit for cultivation. If the owners were found to be unable to remove the obstructions on account of the expensive nature of the work, the Government got it done at their own expense to prevent cultivable land lying waste for however short a time. The labouring classes also received all necessary encouragement and support. New industries were introduced in many parts of the country and artisans invited from abroad.

Person and property were always within the full benefit of royal protection. The following extract from the Chattavařiōla or code of laws sanctioned by the Dharma Rāja with the advice of his talented minister Rājā Kēśava Dās is one which will do credit to any system of civilised jurisprudence in any part of the world.

^{*} The Travancore Land Revenue Manual by R. Mahadeva Aiyar Vol. V.

[†] History of Travancore, by Shungoonny Menon, p. 176 & 177.

"The District Officials shall not apply fetters, chains and manacles to the ryots who are found entangled in criminal charges. When a female petitioner comes before the District Cutchery, her complaint shall be heard and settled at once; and on no account shall a female be detained for a night. No petitioner was to be detained to his inconvenience and put to expense for feeding himself, pending the settlement of his case. If the case was not decided within eight days, the petitioner was to be fed at the expense of the Officer".

These measures adopted by the Mahāfāja find mention in the writings of foreigners who knew Travancore well. "Public security", says Fra Bartholomew, "is restored throughout the whole country; robbery and murder are no longer heard of; no one has occasion to be afraid on the highways; religious worship is never interrupted; and people may rest assured that on every occasion justice will be speedily administered".

To this picture the condition of other parts of India "The dacoits are gang affords an unenviable contrast. robbers of Bengal"; so ran a state paper of A contrast with 1772. "They are not like the robbers of other states. England, individuals driven to such desperate courses by sudden want. They are robbers by profession and even by birth".* The state of affairs in Indian India is described thus:-- "The Native States were disorganised and society was on the verge of dissolution; the people were crushed by despots and ruined by exaction; the country was over-run by bandits and its resources were wasted by enemies; armed forces existed only to plunder, torture and to mutiny. Government there was none; it has ceased to exist. There remained only misery and oppression".† The contrast between Travancore

[•] India of the Queen, by Sir William Hunter, pp. 106, 108 and 109.

[†] Prinsep's History of the Political and Military transactions in India during the administration of the Marquis of Hastings.

and many of the other states was therefore all the more remarkable.

While the British Government and those of the governments of Indian States were pre-occupied with putting down violence and crime, the rulers of Travancore were able to devote their energies and their resources to improve the conditions of life, building dams, constructing irrigation channels, encouraging trade and industry, providing means of communication, and improving the administration of justice.

In 1805 A. D. certain powers of intervention were conceded to the Company on the advice of Dalawā Vēlu Thampi. The alliance was a free, voluntary agreement due to a perception of mutual advantages. On the extension of the treaty map of India the Paramount Power was often obliged to interfere in the internal administration of many of the important states. Annexation had to be resorted to in certain cases. Abdication had to be counselled in order to save the subjects from misgovernment. But Travancore has generally maintained its reputation for good government and its steadfast alliance with the Crown of England.

The insurrection of 1809 A. D. was a solitary episode, the result of a collision between the insulting obstinacy of the British Resident, Colonel Macaulay,

No break at any time. who attempted to brush aside the provisions of sacred treaties, and the stern determination of the minister Vēlu Thampi who chose ultimately to measure his strength with that of his opponent. The Dalawā might have been right or he might have been wrong. But when the British Government sent their army to Travancore to restore peace, they averred that they had no other view in directing the movements of troops than "to rescue the Rāja of Travancore from the influence of the Dewan, to put an end to the power of that dangerous

minister, and to re-establish the connection of the two governments on a secure and happy foundation."* normal tenor was soon restored. The British Government convinced itself that the Mahārāja was not responsible for the unfortunate development. The road to Paramountcy lay open but the British officers of the time remembered the services rendered by Travancore to the success of the British arms in India. They still treated the Mahārāja as an independent ruler and showed considerable respect to the officers of his government. A striking instance of healthy reciprocity of feeling is furnished by the fact that when Ummini Thampi, the Dewan, paid a formal visit to the British camp in 1809, after the insurrection, he was received with military honours and a salute of 15 guns.† The accession of Mahārāni Gouri Lekshmi Bāvi shortly afterwards provided an opportunity for greater intercession and control over the administration of the State. She wrote to the Resident that she could not do better than place herself under the guidance and support of the Honourable East India Company. The entrustment became more effective when the Resident. Colonel Munro, assumed the duties of Dewan as well.

The permanent alliance was maintained and strengthened by the two queens, Gouri Lekshmi Bāyi and Gouri The work of two Queens.

Pārvathi Bāyi, whose reigns covered eighteen years during a period of transition. It was then that Travancore began to feel that she was a part of wider India. The inhabitants felt the glow of loyalty to the Ruler and they were convinced that the safety of the country depended on the stability, support and friendship of the British Government. The old village and tribal assemblies had ceased to function. Their last vestiges scon disappeared. The military organisation was completely broken. Swords were converted into ploughshares. The assumption of the management of temples by the Government destroyed the

^{*} The Proclamation issued by the Government of Madras, 17th January 1809. † State Manual by V. Nagam Aiya, Vol. I, p. 448.

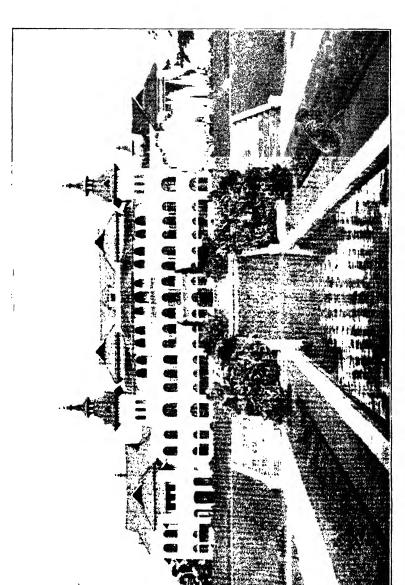
influence of the aristocracy. The work of missionary bodies created a desire for social equality. The Ranis expressed themselves clearly against root-and-branch reforms affecting religious rites and charities. But they were amenable to the legitimate demands of the times. Colonel Munro was able to do a great deal of good work, correcting abuses and reforming systems. There was, however, one point of difference between Travancore and the British territories in India. It lay in the fact that while in the other parts of India order had to be evolved out of chaos, all that was necessary in Travancore was to build on the existing foundations of orderly government. The abolition of certain taxes on the lower orders of society, the removal of the ban on their wearing ornaments of gold and silver, and the amelioration of the condition of predial slaves, were some of the measures by which the Ranis carried forward the banner of progress. It was during that period that missionary societies received tangible tokens of encouragement. Sites for churches were granted free and large amounts sanctioned for buildings. Extensive areas were assigned for their maintenance. Rāni Pārvathi Bayi issued a rescript commanding that the State should defray the entire cost of the education of its people. It said that the object was to see that there might be no backwardness in the spread of enlightenment among the people, that they might become better subjects and better public servants, and that the "reputation of the State might increase thereby". Another ordinance promulgated by the Rāṇi related to the recruitment to the public service. Good birth, character and capacity, were declared the indispensable qualifications for entertainment.

Disputes of an indefensible character have sometimes created misunderstandings between individual Dewans and individual Residents. Sometimes the high-handed interference of the Residents has marred the tranquil course of personal relations. The intrigues of interested persons resulted in permanent personal

dislike between Swathi Thirunal Maharaja and General Cullen. The unsatisfactory state of the finances and the weakness of the administration gave rise to protracted correspondence between Uthram Thirunal Mahaiaja and the British authorities at Madras and Calcutta. But the alliance has always been firm, invariable and sacrosanct. In Travancore there has been no retrogression. Nor has there been a single instance in which the subjects were guilty of disloyalty or disaffection to the Ruler. In the middle of the nineteenth century, when many other Indian states were groaning under the weight of a bad internal administration and the Paramount Power was forced to keep a vigilant watch over the rulers and call them to order periodically, Travancore was recognised as the "Model State". Mahārāja Ayilyam Thirunāl who raised the State to that level of importance was succeeded by his brother, Mahāfāja Śrī Viśākhom Thirunāl who "squeezed into five short years of his reign the work of a whole lifetime". He made strenuous efforts to maintain a pure administration and set an example for high character and efficiency.

'He was succeeded by Mahārāja Śrī Mūlam Thirunāl of happy memory. No Indian ruler dedicated more energy and attention to public affairs and none Sri Mülam Thirunal sanctioned more funds for nation-building Mahāraja. activities, education, public health, the improvement of communications, and the encouragement of irrigational facilities and industrial possibilities. Šīī Mūlam Thirunal's appreciation of the British system of government took practical shape in the establishment of the Legislative Council, the Popular Assembly, and a large number of Municipal Councils. The Government of Madras in reviewing the Administration Reports of the Government of Travancore used the most eloquent expressions in commending the reign for its energy and "its high standard of efficiency combined with moderation in its demands year after year". The Paramount Power recognised "the unremitting efforts of His Highness the Maharaja and the ever-increasing prosperity of a favoured territory under a prudent administrator". Lord Irwin visited Travancore in 1930 during the administration of the State by Her Highness Sēthu Lekshmi Bāyi, the Mahārāṇi Regent (1100—1107). He expressed the hope that the Regency would conclude as happily as it had begun. And so it did. The installation of His Highness the Mahārāja Śrī Chithira Thirunāļ was celebrated amidst the rejoicings of the people in an atmosphere of invigorating hope.

The relationship of three centuries has thus been of the most cordial character. The Mahārajās of Travancore have always evinced a genuine de-Personal contact: sire to render assistance to the British The present Mahārāja. Government in the solution of economic and other problems in a manner which would help the advancement of the interests of India and the solidarity of the Empire. In the sixties of the last century the Government of Travancore signed the Interportal Convention in the hope that free international trade would ultimately prove beneficial to the country notwithstanding a loss of revenue. Large areas of fertile lands were assigned to the Kannan Dēvan Hills Produce Company at very reasonable rates of assessment, and substantial sums of money expended on the construction of roads and bridges for their benefit. British Indian subjects were permitted to take up large tracts on the hills for the cultivation of cardamoms on terms similar to those given to the subjects of the State. The history of the Perivar Lease bears eloquent testimony to the readiness of the Travancore government to help the agriculturists in the Madura District of the Madras Presidency by permitting the diversion of the waters of the Periyar—the largest river in the State-for purposes of irrigation, though such diversion is in many respects prejudicial to the permanent interests of the people in the valleys on this side of the Ghats and the country lower down. These instances show the stability and strength of the attachment which the rulers of Travancore



The Kaudiyar Palace

bear towards the British Government. But the majesty of the British Crown assumed shape and proportion only at distant intervals in Delhi at the time of the imperial durbars. An age-long custom and the respect for precedents prevented the ruling family from crossing the seas. But the visit of His Highness the present Mahārāja, His Highness's mother and other members of the ruling family to the United Kingdom has transferred a "cold tradition into a warm living feeling of staunch and abiding friendship".

The scheme of this chapter does not warrant a detailed account of the principal events relating to the history of Travancore under successive rulers. But Equality the basis of the alliance. historic justice requires the narration of certain facts to show that the state occupies a unique position in its political and constitutional relations with the Paramount Power. The sovereigns of Travancore entered into the alliance on terms of perfect equality. In the older treaties the Mahārāja was described as "His Majesty". Among the ruling dynasties of India there are many which owe their existence to grants made by the British Government. There are others which fought against them, were defeated, and obliged to accept terms as feudatories. Still others there are who vacillated between one power and another until the British Raj became an absolute, incontestable verity. But Travancore, having once entered into friendship, has always remained firm and faithful. The British were not masters of South India at the time of the earlier agree-The assistance of the Mahārājās of Travancore ments. was to them a great asset. The Travancore troops contributed their share to the success of the British arms. During the difficult times of the wars with Hyder Ali of Mysore, when the English had scarcely the credit of a single ally in South India, the Mahārāja of Travancore stood forth their avowed friend.* "The productiveness of his dominions

^{*} Historical sketch of the Princes of India, by an Officer in the service of the Honourable East India Company, 1833.

enabled him to contribute considerably to the military resources of the English", says Mill, "and in the last war with Hyder his co-operation had been sufficiently extensive".* The minister of the Mahārāja of Travancore was of great help to the British in establishing order in the district of Malabar after Tippu's invasion.

It is not merely in the realms of administrative policy or social uplift that the Mahārājās of Travancore gave the lead to their people. The provinces of Royalty and learning yielded to the authority of their Literature. genius. In India there had been kings who were also poets and scholars. Harsha and Bhōja shine for ever in the firmament of glory. Literary merit, however, was not the rule but the exception, the accomplishment of particular individuals. But in Travancore poetic genius and literary greatness are as much the birth-right of the sovereigns as the membership in the ruling dynasty. There is no other family known to history, whether of royal extraction or plebian prominence, which presents a like pedigree of literary greatness, the like continuity of learning and culture. The genius of the Chēra kings has descended in the lawful line ensuring a permanent efflorescence.

Ilamkō Aṭikal, the brother of Śenkuṭṭuvan and the author of the Tamil classic, the Śilappathikāram, was a renowned poet and erudite scholar. The later generations kept up the great traditions. The works of Kulaśēkhara Ālwār in Sanskrit and Tamil have earned a permanent place in the literature of India. Ravi Varma Kulaśēkhara was as great a poet and scholar as he was an invincible warrior. The lamp continued to burn under the fostering care of his successors. Mārthānḍa Varma the Great was a great patron of letters. Kunchan Nambiyār and Rāmapurathu Vāriar, the greatest poets of the day, glorified him in their immortal works. It is recorded of that Mahārāja that in Madura, whither he had gone to mobilise an army, he attended

^{*} History of British India by Mill, Vol. V. p. 325.

a conference of grammarians and logicians and elicited the admiration of the assemblage by his exceptional talents. The literary works of his successor Rama Varma, both in Sanskrit and in Malayalam, are well-known. He was a poet, philosopher and critic all in one. The value of his contribution to knowledge is universally acknowledged. Prince Aswathi Thirunal his nephew, was a Sanskrit poet of the highest order and the author of four great Kathakalis. besides certain musical compositions. The eighteen years of the reign of the great Swathi Thirunal Maharaja were a blessing to literature and fine arts in Travancore. He was the master of several languages, both European and Indian. His poetical works bear the mark of genius and his musical compositions rank with those of the great Thyagaraja. Mahārāja Mārthānda Varma, his brother, was also a poet. In his reign Kathakali, the indigenous drama of Malabar. reached the high-water mark of its popularity in Kērala. His successors were equally blessed by the muses.

In that galaxy of the favoured the Ayilyam and Viśākhom brothers occupy a position of distinct eminence. Śrī Viśākhom Thirunāļ wrote and spoke English like the best among learned Englishmen. He was a thinker and a scholar. In the reign of His Highness Śrī Mūlam Thirunāļ Mahārāja, Travancore won the proud distinction of being the best-educated part in the Indian Empire. The accomplishments of the queens, Rāni Gouri Lekshmi Bāyi, the mother of Swāthi Thirunāl Mahārāja, and Rāni Gouri Pārvathi Bāyi, the Regent, are proverbial. No better example need be cited than that of Her Highness Mahārāni Sētu Pārvathi Bāyi, who shines to-day as the accredited representative of Indian womanhood and whose talents and patriotism are the admiration of the world.

If the people of Travancore are blessed with talented Common bond of rulers in an unbroken line, the rulers are in culture. their turn blessed with a people civilised, law-abiding and loyal. The outstanding eminence of the

ruling family has been the cause and the effect of the high level of intelligence and the adaptability of the people. It is the pride of Travancore that her sons and daughters have always helped the cause of learning. The Western Ghats never succeeded in keeping Travancore and Malabar as an isolated tract in the regions of the intellect. In ancient times Kērala was an integral portion of Tamilakam. There was a close affinity between the country on this side of the Ghats and the Tamilnad on the other side, in language, customs and religious observances. Reference has already been made to Ilamkō Atikal, and Kulaśēkhara Ālwār, the renowned Tamil poets. There were others also who served to link Travancore with the world of thought and culture outside. In the third century Manicka Vachakar, the minister of the Pandyan king, one of the greatest scholars and philosophers of the time, visited Vaikom and was inspired by all that he saw on the west coast. Viralmintan Nāyanār, one of the Śaiva saints famous in history and literature, was a native of Chengannūr in middle Travancore. Sundara Mūrti, the great poetdevotee of Siva, was a friend of some of the rulers of Kērala. Nilakantanār of Muziris (Cranganore) was the commentator of the great Tamil work, the Irayanar Akapporul. Facts like these establish the intercourse which existed between Travancore and the Tamil-speaking districts.

Nor was it in Tamil literature or South Indian thought alone that Kērala exercised its influence. Learned men from Kērala delighted to visit the ancient outposts of Aryan culture in the north. It afforded facility for interchange of thought. Buddhism and Jainism, Śaivaism and Vaishnavism, found their votaries here in large numbers. Kānchīvaram was the meeting place of Āryan and Dravidian culture. The south influenced the north of India as the north influenced the south. Chānakya, the minister of the Mauryan Emperor Chandra Gupta, was a native of Kānchīvaram. He was one of the glorious band of learned men of South India, who became the leaders of thought and the torch-bearers of culture throughout

the whole of India more than two thousand years ago.* Vararuchi who was an authority on grammar, astrology and kindred sciences was also a native of Kērala. From the hamlet of Kaladi on the Periyar, now in Travancore territory, Sankaracharya carried the light of Advaita philosophy, that noble system of thought, to the heights of Badrinath and Kedarnath, from where it flowed down and spread throughout the length and breadth of Bhārathavarsha. Nāgārjuna and Sāyana whose names are venerated throughout India were men of the south. The continuity of culture was not confined to the doctrines of religion or the principles of philosophy. There are clear marks of intercourse in literature and science as well. Sanskrit works composed in Kēraļa were commented upon by scholars in distant Kashmir, while the literary productions of Kashmir, Ujjain and Bengal found their way to this distant land.† Scientific treatises reveal a family likeness which manifests itself in astronomy, astrology and medicine. Cultural currents can be traced between Kēraļa and Bengal as well.‡ It was the Gītāgövinda of Jayadēva which helped the growth of the Bhakti cult in Kērala. It also gave the stimulus to the growth of the indigenous drama of Malabar, the Kathakali, the art value of which is so much appreciated to-day by Indians and Europeans alike.

Other arts have received similar encouragement. "Some of the temples in Travancore are rich in sculptures and bronzes of remarkable demeanour and elegance of craftsmanship". The fresco paintings in the old palace at Padmanabhapuram and the Śiī Padmanabhaswami temple at Trivandrum are remarkable for "their

^{*} P. T. Srinivasa Iyengar, History of the Tamils, pp. 326-340.

[†] The commentator of Yudhishtifa Vijaya, the work of Vasu Bhattathi i of Kerala was a Kashmirian.

[†] For a learned discussion on this subject see the article entitled "Light thrown on Cultural Currents," in the Trivandrum Sanskrit Series, by P. K. Narayana Pillai, to the Souvenir of the Silver Jubilee Celebration of Oriental Manuscripts. Also the article by Mahākavi, Rao Sahib Ullūr S. Paramēswara Aiyer, published in the Sāhitya Parishat Magazine.

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grouping, delicately verile line, attractive colouring, vivid yet reserved life, and high cosmic and psychological symbolism". Music also owes much of its variety and harmony to the intercourse between the north and the south. Seven hundred years ago Alaudin Khilji carried away with him musicians from the south. The gold and silver which he plundered lighted his way to the throne. But the art and culture which followed his army in its return to the north have left effects of a more permanent character. Nor has the present absolutely ruled out the marks of that influence. The rapturous compositions of Swāthi Thirunāl Mahārāja are admired throughout India. So deeply did the great Thyagaraja esteem the talents of Govinda Marar of Travancore that he styled him Gövindaswāmi and composed one of his famous songs in his honour. It was not in music alone that Travancore made contributions to the fine arts. The paintings of Ravi Varma are among the best achievements of European influence in oil painting. Ravi Varma, be it remembered, was the maternal great grand-father of His Highness the present Mahārāja of Travancore.

Such is the picture that Travancore presents in the permanent relief map of Indian culture. There is no State or province in India, or perhaps in any Education. other country, where a larger proportion of public revenue is expended by the Government in providing educational facilities. The Government maintains 3,644 schools and 10 colleges. The reign of the late Mahārāja Śrī Mūlam Thirunal witnessed a consistent policy to place education within the reach of all, not failing to take account of the economic and social condition of the backward The altitude was not made to suffer in communities. order to enlarge the base. The Mahārāja reared the magnificent edifice on the solid foundations laid by his predecessors for the advancement of higher education among the subjects. Those foundations were well and truly laid in a manner which was adequate to impart strength

and durability to a system of public education of a high order. When the work of erecting the Trivandrum College was started, the Mahārāja Āyilyam Thirunāl observed:— "There is every encouragement to be derived from the steady zeal of those who are charged with the weighty interests of education, from the great eagerness shown by parents for the intellectual advancement of their children, and from the remarkable receptive power manifested by the youths themselves. To the numerous pupils I see assembled on this auspicious occasion, I will only say, pursue your various studies with the utmost devotion and perseverence; prove yourself formidable yet friendly rivals to those whom other colleges send abroad".

The Government of His Highness the present Mahārāja is endeavouring to combine the knowledge of the sciences and technological subjects which will enable the scholars to earn a decent livelihood which will keep the batteries of the stomach in tune, advancing at the same time the pleasures of the intellect. A separate University for Travancore with His Highness the Mahārāja as the Chancellor has now been established in order to facilitate the new orientation of ideas and turn it to the advantage of the people and the prosperity of the country.

The health and strength of the population has been a subject of great care and attention on the part of the Medical aid. Government. The major portion of the area of the State commands good, clear, potable water and the people are scrupulously neat and clean. The isolated homesteads are generally responsible for natural sanitary conditions. Nor was the assistance of medical service wanting from the earliest days. The science of Ayurvēda (Indian Medicine) also attained a high degree of efficiency and gained its deserved popularity many centuries ago. Kēraļa has contributed to the development of medicine by supplementing the system of Charaka and Śuśruta by new indigenous methods of treatment. But by the beginning

of the 19th century the Allopathic system became more prominent. The beginnings of the Medical Department were laid a hundred years ago. One of the Mahārājās, Mārthānda Varma Uthram Thirunāl (1022 to 1036 M. E.). took such deep interest in the Allopathic system of medical treatment that he learnt it himself and started his own dispensary. He became a good physician and a skilful surgeon. The stimulus thus given had great effect in removing the scruples of the conservative section against the foreign system of treatment. The Allopathic system has now established itself firmly in the State. There are now one hundred and seven medical institutions, hospitals and dispensaries taken together, financed by Government, besides a considerable number of private dispensaries. The important hospitals are provided with wellequipped operation theatres. The work done in the General Hospital has merited the approbation of distinguished personages as well as eminent professional men.

The Medical Service is supplemented by one hundred and fifty Ayurvēdic dispensaries and four Ayurvēdic hospitals. The indigenous system of medical treatment has always been popular in Travancore among all classes. The hereditary physicians of Malabar are famous for their proficiency in the art of healing and their kindly treatment of those who seek their assistance. The unique feature of the hospitals and dispensaries, both Allopathic and Ayurvēdic, in Travancore is that professional services as well as medicines are given to the patients free of cost, the Government defraying the whole expenses.

The success of education and medical relief is largely due to the facilities for communication. Besides the back
Communications waters, canals and navigable rivers there are 5,267 miles of road. There is 69 of a mile of road for every square mile of the area, or 1.32 miles per square mile of the inhabited area, leaving out the forest tracts. There is also a railway line between Shenkōtta and

Trivandrum and an efficient bus service in all parts of the State, which affords ample convenience to traffic at reason-Sachivothama Sir C. P. Ramaswamy Iyer is interesting himself in the development and co-ordination of the various lines of communication. He has emphasised the imperative necessity of agricultural improvement and industrial effort for the success of which the further development of communications is absolutely essential. of the special features of the country," says he, "is the series of wide backwaters which form the cheapest possible route for traffic from Cochin to Trivandrum. There are navigable canals along the entire littoral and innumerable streams and rivers flowing westward to the sea; properly dredged and deepened, these water-ways will be many times cheaper than any rail or road transport, especially for heavy traffic, and if motor tugs are introduced, Travancore need not suffer from comparison with any modern state in the matter of transport facilities".*

The Administration Reports of the Government of Travancore bear ample testimony to the success of their work in the various channels of moral and Moral and material prosperity. "Far outweighing even material prosperity. the value of the natural resources of the country, imposing as they are, are the character and potentialities of the people of the land".....His Highness the present Mahārāja does not propose to rest on his historic laurels but he is determined to put Travancore in its proper place on the Indian map; and he has the great advantage of ruling over a people who possess great cultural and artistic traditions and whose intellectual standards are very high and whose enterprise is proverbial". Apart from productive assets the State possesses ample reserves in the shape of fluid securities. The credit of the state is very high in the money market. Thus the position of Travancore among the Indian States is deservedly prominent.

^{*} Sir C. P. Ramaswamy Iyer, Broadcast at Bombay.

In other states the picture of a reform, the foundation of colleges, the opening of hospitals, the improvement of courts of justice, and the inauguration of legislative chambers are set to great advantage by their background. In Travancore it is all a stereotyped normality which fails to elicit sudden approbation or attract extraordinary notice.

For a long time "Delhi durest" prevented a due appreciation of Travancore in the imperial metropolis. In the days when the standard books on Native Solid but quiet States were written, a journey to Trivanwork. drum was long, tedious and expensive. It was only in 1900 that, for the first time, the Viceroy and Governor-General of India, Lord Curzon, accepted the invitation of the Mahārāja to "this remote corner of India, at so much personal inconvenience and discomfort". This neglect of the State in the tour programme of His Majesty's representative was due to the circumstance that for certain historic reasons the political relationship of the State was originally with the Government of Bombay and later with the Government of Madras. On the other hand, the important states in Central and Northern India were under the direct control of the Government of India. They were nearer to the imperial capital. The rulers of those states had abundant opportunity to invite British officers and globetrotters and impress them with their hospitality and their importance. But the Mahārājās of Travancore followed a different course. They led a stay-at-home life, working silently for the advancement of their subjects. The appreciations recorded by the Madras Government in reviewing the Administration Reports of the Government of Travancore obtained very little publicity in other parts of India.

Writers and publicists are apt to think that Travancore is more or less like one of the states where the ruler prefers his own pleasure to the good of his subjects and exercises his authority over an ill-educated and disorganised people. Prepossessions based on the condition of states placed in the same category in political literature naturally take a long time to die out. Deep-rooted prejudice clouds the vision of superficial observers who are inclined to put down hearsay information in the form of responsible statements. Exceptions fail to arrest attention, while distance prevents a careful study and examination. It is through the operation of all these causes that the achievements of Travancore have not been delineated in correct proportions. In many of the Indian states the collection and expenditure of public funds, the administration of justice and the methods of legislation are primitive and arbitrary. Their number is large and therefore they form the basis for generalisation.

The following classification of Indian States made by a European writer typifies the colossal ignorance of literary ambition. Joseph Chailley, a member of the French Chamber of Deputies, divides the rulers of Indian States into three classes.*

- 1. The very few who govern according to European ideas of order and justice and who seem to take a personal interest in the welfare of the people,
- 2. Those who have introduced the elements of a reformed organisation, have enacted laws, have appointed judges and have then appointed a Wazir to govern for them and relieve them of responsibility.
- 3. Those who still imagine that they are the State, that its resources are private property, that its inhabitants are their slaves, and that their chief business is pleasure.

The classification is manifestly wrong and incomprehensive; for, a state like Travancore does not fall within any of these classes. It occupies a much higher rank than the states which furnish the examples from which the learned writer drew his conclusions. The highest compliment given to the ruler in this three-fold classification is that

[•] Administrative Problems in India by Joseph Chailley.

he seems to take a personal interest in the affairs of his kingdom.

The presentation of an ideal based on the experience of even the more advanced states is equally inapplicable to Travancore. His Highness the Mahāfāja of Bikānir, for a long time the President of the Chamber of Princes, and well acquainted with the administration of the various states, enunciated seven cardinal points as the essentials of good government in the states. They are:

- 1. The ruler of a state should have a fixed and well-defined privy purse and a clear dividing line between his personal expenditure and that of the state.
- 2. Security of life and property by the employment of an efficient and uncorrupt police.
 - 3. An independent judiciary.
- 4. The reign of Law including certainty of Law, its uniformity, and its approximation, wherever possible, with the laws of British India.
 - 5. Stability of the Public Service.
 - 6. Efficiency and continuity of administration.
- 7. Beneficent rule in the interests of the general well-being and contentment of the subjects.

Travancore easily transcends these tests as well. There is no period in her history when all these conditions were not severally and jointly satisfied. The accession speeches of the Mahārājās of Travancore make it abundantly clear that they always regarded the state as everything and their personal enjoyment as a matter of no concern. There is no state anywhere in India where the austere simplicity and rigid personal economy of the ruler has reduced the Civil List to such small dimensions as in Travancore. No ruler takes a smaller portion of the public revenues for his own use. Taxation is decidedly lighter. The rule of law is one of the prominent characteristics of the administration and the laws are not only in line with those in force in British India but are in

certain respects more progressive and more equitable. There is not one law for the citizen and another law for the The courts have been for a very long time absolutely independent of the executive. During the last one hundred years there has not been a single instance in which the ruler has interfered with the even course of justice as administered by the judicial tribunals. The motto of the High Court "Fiat Justitia Ruat Coelum" is scrupulously respected by the sovereign and fits in with his own motto "Dharmosmat Kuladaivatham", which means that the Dharma or law is His Highness' household divinity. This explains how the Judicial Committee of the Privy Council was ready to approve of a decision of the Travancore High Court and follow it in coming to judgment more than fifty years ago. * The machinery of execution is highly satisfactory. The Police are efficient and have been compared with the London Police by a most judicious critic, one who never assumes the role of a panegyrist of governmental authority, Mahatma Gandhi.

There are, in India, states where officers are changed with every return of the sun and the moon; but in Travancore the Public Service is permanent and secure. Arbitrary dismissals of public servants have been unknown. Wellconceived rules regulate departmental enquiries. administration has adapted itself to modern forms of government in the interests of the progressive welfare of the country. Education, Public Health, Drainage and Irrigation Schemes, the Improvement of Agricultural and Industrial conditions, and the protection of person and property by a proper administration of justice, consume the vast bulk of the revenue. Nation-building activities are being pursued with vigour. The annual financial statement is presented to the Houses of Legislature, while the expenditure is audited by an efficient staff of officers and finally examined by the Public Accounts Committee appointed by the Government, one-half of the members thereof being

^{* 3} Indian Appeals 154.

elected by the Legislature. The procedure enables the representatives of the people to keep a vigilant watch over the administrative policy of the Government as well as the security of the finances of the State.

Travancore is one of the important political units where representative institutions have been functioning for the longest period. The Legislative Council was brought into existence in 1888, the first institution of its kind in an Indian State. It was enlarged in 1898, then Representative in 1919 and again in 1921. There was Institutions. also a Popular Assembly whose function was to place before the Government the wants and wishes of the people. Dewan after Dewan has spoken of its vigilance, ability, and sobriety in language of high commendation. Mr. Rajagonalachari (afterwards Sir P. Rajagōpālāchāri) acknowledged the good work of the Assembly in words of genuine admiration. "It has been my experience", said he, "that the representations made by the members on the measures of the Government have generally thrown a flood of light on aspects of questions which neither the Dewan nor the heads of departments concerned ever thought of ".* On another occasion he said that "the successive issues of the Travancore Government Gazette for now several months would bear testimony to the fact that many of the problems which His Highness' Government have been engaged in dealing with are problems set to them by the Assembly." Other Dewans have also given it the fullest praise.

In 1933 the Popular Assembly was placed on a statutory basis and reformed in such a manner as to function as the Lower House of a bicameral legislature, the Legislative Council, called henceforth the Śrī Chithira State Council, being the Upper House. The franchise was suitably extended. Both Houses have now the right to initiate and

Vide Proceedings of the Sri Mulam Popular Assembly dated 5th March 1912.

pass legislation, to discuss the annual budget, to interpellate Government, and to ask supplementary questions on matters of general public interest. These constitutional reforms inaugurated by His Highness the present Mahārāja form a substantial advance in the devolution of powers on the representatives of the people. The Regulation and the Rules were drafted under the advice of Sir C. P. Ramaswāmy Iyer. Nowhere in the other Indian states has the experiment of a double-chambered legislature been tried. The interest taken by people in the working of these deliberative assemblies is testified to by the fact that in general constituencies more than 65-1 per cent. of the voters took part in the polling in the last general election. The percentage in some constituencies was very much higher.

It is a matter for special gratification that women are playing a prominent part in public life. The position of women in Travancore may be best described Woman's role. in the authoritative words of Her Highness Mahārāņi Sēthu Pārvathi Bāyi in her presidential address to the tenth session of the All-India Women's Conference held at Trivandrum. "The woman is here recognised as the head of the family, and succession is traced through her. No restriction on the holding and disposition of property; and no inequalities regarding education, social life, and cultural growth have hampered our sex. Not only has our history afforded instances of queens who have stamped their individuality on the chronicles of their country, but in the fine arts and philosophy women have played a notable part. The equality of women with men in the matter of political as well as property rights is to-day an established fact. Female literacy in Travancore has attained to a high standard".*

That standard continues to rise. In 1874—75 the total number of girls under instruction in the schools was but 1,019. In 1934—35 it was 269,444, while in the sister State of

Her Highness Mahārāni Sēthu Pārvathi Bāyi's Presidential Address at the All-India Women's Conference.

Mysore which spends nearly seven lakhs of rupees annually on female education the number of females attending schools and colleges is only 66,948. Co-education in schools tends to bring about greater self-reliance. A large number of women have already entered the liberal professions of pedagogy, medicine and law. Twenty eight thousand women have joined the co-operative movement—a not inconsiderable number. There are women members in the Houses of Legislature. According to the latest electoral rolls, 31.21 per cent. of the voters are women, who number 166,718, the number of males being 367,369. Thus the women of Travancore enjoy rights and privileges which have not yet fallen to the lot of their sisters in other countries. In India the right to inherit, irrespective of sex, according to the rules of natural relationship, and the right of unfettered enjoyment and alienation of property have still to be recognised. Even in England, until recently, it was impossible for a woman to hold property in her own right or to recover money from her debtor or even to buy things for household use except as the implied agent of the husband.

Facts like these must open the eyes of ill-informed critics in western countries who are prone to think that even the better classes of women in India live behind the purdah while the poorer classes draw out a miserable existence as the slaves of their husbands. "Where women are honoured, there the Gods rejoice" is the text of Manu, the ancient law-giver of India. It is the glory of Travancore and Kēraļa that, though the maxim is not properly honoured in the great centres of Āryan civilisation in India, and the principle of the wife being the better-half of the husband has secured but a tardy and inadequate recognition in the systems of western jurisprudence, the women of Travancore are not only the queens of society but also form the stock of descent in Marumakkathāyam Tharavāds.

Travancore is an interesting study to the student of history and politics, as it is to the student of religion, law,

customs and manners. "In it are preserved the survivals of nearly all the ancient Indian peoples, The old and the religions, laws, customs and manners. The new. old and new can be studied together within its limited area, which is not possible elsewhere. The scientific study of Indian institutions should begin from the south rather than from the north." * This view expressed by the historian may be better appreciated to-day when the trend of modern opinion is in favour of the fact that Indian civilisation is traceable mainly to Dravidian origins. But it is not in that alone that the history of Travancore and its institutions deserve a careful study. Travancore was great in the past and it is equally great in the economy of modern civilisation.

The tribute of praise which was tendered to His Highness the Mahāraja by Sir Samuel Hoare attests the appreciation of His Majesty's Government His Highness the of the progress achieved in Travancore. Mahārāja. The Secretary of State described Travancore as "one of the greatest of Indian states, not only comparable in population to many European states, but also one of the most beautiful and richly endowed territories in the world, a country rich with scenery and equally rich with natural resources, and rich in waterways and communications, a country on which in fact both land and sea are smiling so agreeably." "But over and above all this", continued Sir Samuel Hoare, "Travancore is now making a constitutional experiment modelled on British institutions but having certain special features in the matter of the two chambers of the Legislature." The Earl of Halifax paid similar compliments to Travancore in the House of Lords.

The Earl of Willingdon has also borne eloquent testimony to the work of His Highness the Mahārāja even at the commencement of His Highness' reign. From the plenitude of his knowledge of men and things throughout the empire,

^{*} Ancient History of India, V. A. Smith.

and with the sureness of a judgment which was the result of intimate friendship with the ruling family and the inhabitants of Travancore, the Viceroy said:—" I would like once again to congratulate Your Highness on the keen and courageous manner in which you are carrying out your heavy responsibilities. It is true that you have only exercised your ruling powers for the last two years but your programme mapped out for the future is one which will be a credit to a ruler of many years' standing. I look forward with hope to a future when the State of Travancore will not only enjoy increasing internal prosperity but will play a part worthy of its status in the great federation of states and provinces which is to direct in the future the affairs of this great country."

No ruler of Travancore or any other Indian State ever approached his great task with greater equipment or greater sympathy than His Highness Śrī Chithira Thirunal Maharaja. His Highness' goodness of heart and solicitude for the public weal glowed into a living force when, after all his travels and sojourns, he returned to Trivandrum to take charge of his great heritage and to rule over his loyal sub-The installation speech made a deep impression. "It is my hope," said His Highness, "that I shall be enabled by God's grace to earn the affection and esteem of all communities and classes among my people, whose advancement in every department of life will be my perpetual pre-occupation and my scle aim. It is a very great trust that has been transmitted to me and I realise that that trust will not be well discharged except to the extent that I am able to promote the peace, contentment and prosperity of my subjects."

Travancore is a state where a century of reform has built up an administrative system efficient, comprehensive and permanent. His Highness Śrī Chithira Thirunā! Mahārāja has resolved to make the edifice complete, commodious, and commensurate with modern requirements. In this great work, in this noble endeavour, Her Highness Mahārāni Sēthu Pārvathi Bāyi has been of inestimable assistance.

His Highness the Mahārāja has borne testimony to Her Highness' influence. "It is a consolation and a great privilege", said His Highness, "that in my task I shall have the inestimable advantage of the watchful solicitude and the unparalleled devotion of my mother, to whom I owe more than I can ever express in words". *

This is a unique advantage; for, the history of Travancore does not record another instance of the mother of a ruling sovereign being spared to witness the great deeds of her son and to strengthen and support him with her advice and her blessings. His Highness believes in the future of his State and is alive to the capacity of his subjects to play their legitimate part in the United India of the future. His Highness' extensive travels in India and in Europe have opened the eyes of the world to the importance of this ancient kingdom. The experience gained by His Highness in the great centres of western culture and industry is of immense advantage in the new orientation of the political and economic life of the people envisaged by His Highness and is being implemented by the Government. The Dewan has explained that policy in these memorable words:-"What is needed to enable Travancore to make the utmost use of her opportunities is an overhauling of the system of education and a carefully designed economic planning which will, without reproducing the evil effects of the factory system, industrialise the State and not only give secondary occupation to the families of land-holders and agriculturists but also open fresh and useful careers to the middle class unemployed". The establishment of the Travancore University and the inauguration of the Travancore Credit Bank are concrete monuments of wise statesmanship. Parallel to this is the well-ordered endeavour to effect a renaissance in art and culture.

The Temple Entry Proclamation issued by His, Highness the Maharaja has opened a new chapter in the history of Travancore and of India. It is a great charter of liberty,

^{*} Speech at the Installation Durbar.

the result of religious convictions and a desire to redeem the millions of suffering humanity from scepticism and despair. The personal example of Her Highness Mahārāņi Sethu Parvathi Bavi has enlisted for this wise measure of reform the earnest support of women in the citadels of orthodoxy. The Proclamation is cementing the feelings of brotherhood among Hindus. Its repurcussions are exercising a beneficial influence among the followers of other forms of faith. The light which proceeded from Travancore has brought the whole of India under its effulgent sway. The thrill of joy with which it was received throughout India and the civilised world marks a definite stage in the noble work of removing untouchability and unapproachability. The Proclamation is in itself one of the greatest achievements in history. The Government are making every effort to enable the backward communities to take the fullest advantage of that wise measure.

The Proclamation is being "followed up by practical acts, efforts towards economic uplift, well directed spiritual tuition, and an endeavour on the part of all communities to work on the lines of the Proclamation to implement His Highness the Mahārāja's intention so that it may be said of this country that there is no difference of outlook and ideals here, and all differences have been obliterated not solely by a fiat from without, but the spontaneous evolution of a fellow-feeling, of sympathy within the body politic."*

This is the ideal which His Highness the Mahāfāja Śrī Chithifa Thifunāļ stands for, the ideal which he is converting into reality.

LONG MAY HIS HIGHNESS REIGN.

^{*} Sachivothama Sir C. P. Rāmaswāmy Iyer.

Kovalam.

CHAPTER II.

PHYSICAL FEATURES.

Travancore lies in the extreme south-west of the Indian Peninsula. It is bounded by Cochin and Cōimbatore on the north, Madura, Ramnad and Tinnevelly on the east, the Indian Ocean Position and area. on the south, and the Arabian Sea on the west. It forms an irregular triangle, with its apex at Cape Comorin between 8° 4' and 16° 21' North Latitude and 76° 13' and 77° 38' East Longitude. The area of the State is 7.625 square miles, of which more than 2,500 are covered with forest and backwater. Its greatest length, from north to south, is one hundred and seventy four miles, and the greatest breadth, from east to west, seventy five The lofty mountain range, the Western Ghats, which forms the backbone of the Peninsula runs from north to south along the entire eastern boundary. But three isolated tracts, with a total area of two hundred square' miles, project eastward into the adjoining British territory. These are the Anchanad valley, about one hundred and thirty square miles, the Shenkotta taluk, about sixtyfive square miles, and the eastern slopes of the Mahēndragiři hills, about six square miles. The drainage of Travancore is from east to west except in the last-mentioned tracts which drain from west to east.

"The face of the country presents considerable diversity, although its general character, except in the Southern parts, is extremely abrupt and mountainous. The coast, and for a short distance along the borders of the lakes, is generally flat; retreating from it the surface immediately becomes unequal, roughening into slopes which gradually

combine and swell into the mountainous amphitheatre that bounds it on the East, where it falls precipitately, but terminates less abruptly on the South. The collected villages, waving plains, palmyra topes, and extensive cultivation of Nunjanaad, resemble in every particular the neighbouring province of Tinnevelly, except that it in no measure partakes of its comparatively arid sterility. Approaching Northward, this fertile plain is succeeded by the woody and rugged surface of the genuine Malayalim; some few champaign tracts enclosed within this ocean of forest, relieve the uniformity of this sylvan scene. The extent lining the coast for its whole length presents a fertility so near the sea that imparts a peculiar character to the landscape. This rich and variegated tract is flanked by a mountainous barrier, and is finally contrasted with the sombre magnificence and desolate solitude of those wilds of which the elephant seems the natural master; and though the landscape may be too much made up of this wild scenery, it boasts many striking localities and peculiar beauties, if not of the sublime, at least romantic and picturesque kinds. The eye is arrested by the wild rocky precipitous acclivities and fantastic forms assumed by the mountains in the more Southern parts, but proceeding North, the bold and elevated contour of this Alpine tract is less sharply defined; a few rugged cliffs and spiry points or conical summits alone breaking through the sameness of its rounded and sombre outline. This appenine dissolves into clustering hills and romantic inequalities, at whose feet wind innumerable valleys, presenting (particularly in the middle parts) the most delightful landscapes, whose natural beauties are embellished and diversified by the prospect of Churches and Pagodas. Indeed the endless succession of houses and gardens scattered in picturesque disorder over the face of the country, gives in entirely a different appearance from the other coast, the nudity of whose plains is unfavourably contrasted with the robe of

florid and exuberant vegetation that, for a great part of the year, clothes Malayalim. The areca and cocoanut everywhere fringe those picturesque and sequestered glens which gradually expand into the extensive plantations and cultivated lands that skirt the sea and lake. This space is enlivened and fertilised by innumerable rivers and pastoral streams, whose borders are crowned with groves and cultivation that, everywhere following their winding course, present a unique, interesting and charming scenery. infinitely more diversified than most other parts of the Peninsula, and one that would indicate abundance. This is especially the case in Kootanaad; the watery flatness of this fertile fen is relieved by the gardens and habitations so thickly strewn over its surface which exhibits a net-work of rivers meandering through the verdure they create." *

The mountains which separate Travancore on the east from the adjoining British districts and which at some points rise to an elevation of 8,000 feet above the sea are clothed with magnificent primeval forests; while the belt of the tlat country to an average distance of about ten miles from the sea inland, is covered with an almost unbroken continuity of fields and gardens. The whole country is undulating and presents a series of hills and valleys. It is traversed by numerous rivers the waters of which, arrested by the tidal action of the Arabian Sea on the coast, spread themselves out into numerous lakes or lagoons connected here and there by artificial canals.

In respect of its physical features the State may be divided into three distinct parts, each possessing its own geological and meteorological characteristics. The differences also manifest themselves in the flora and fauna. The Lowland Rivision,

[•] Lieutenants Ward and Conner:—Memoir of the Survey of the Travancore and Cochin States. pp. 26—27.

with an area of 1,371 square miles, comprises the flat, alluvial and sandy tracts along the sea-coast. A line of backwaters runs through it from north to south. Here the rainfall ranges from thirty-five inches in the south to one hundred and ten inches in the north.

East of the Lowland Division is the Midland Division which comprises an area of 2,707 square miles and presents low hills and hillocks of varying sizes and heights, dividing the country into numerous valleys. The rainfall varies from fifty-five to one hundred and forty inches.

The Highland Division comprises the eastern tracts the major portion of which consists of the reserved forests of the State. It has a total area of 3,547 square miles. It is traversed by a continuous chain of high mountains with rich and fertile valleys at the base. The rainfall ranges from one hundred to two hundred inches, though some parts obtain even more. The slopes of the mountains are covered with dense forests abounding in valuable timber and rich game.

With its great height and varied configuration, the range of mountains presents a grand and imposing spectacle. The hills are of different elevations, with varying climate and vegetation. Mountains. Some of the loftier mountains are entirely detached from the neighbouring heights. They generally have a precipitous descent towards the west and are connected with a succession of low hills diminishing in altitude towards the coast. In the north the mountains rise to an elevation of more than 8,000 ft. with high plateaus between. The Western Ghats present their highest elevation in the Anamudi (8,841 ft.) which is the highest peak in Travancore, and the highest in India, next to those of the Himalayas. There are several other peaks more or less near it which vary in elevation from 6,500 ft. to 8,455 ft. the most prominent of them being:-

| Karinkulam or Sholeamalla | ••• | 8,455 ft. |
|---------------------------------|-------|-----------|
| Dēvimala | ••• | 8,273 ,, |
| Tellitty or Cooreacomboo | ••• | 7,000 ,, |
| Chockenmudy | • • • | 7,300 ,, |
| Perumputty Kullu | • • • | 6,500 ,, |
| Vāgavarai | ••• | 8,000 ,, |
| Alleamala | ••• | 6,900 ,, |
| Eravimala or Hamilton's Plateau | | 7,880 ,, |
| Kāttumala | • • • | 8,100 ,, |
| Kumafikal | • • • | 8,050 ,, |
| Chemmun Peak | • • • | 7,100 ,, |
| Payratmala | ••• | 7,400 ,, |
| Korumpāra | ••• | 7,900 ,, |
| Pāmpādum Chōla | | 8,000 ,, |

Intervening between them is the elevated plateau commonly known as the High Range. The following is a description of the locality by Munro, the first Superintendent of the Cardamom Hills.

They "rise suddenly from the lower plateau of the Cardamom Hills and form a complete range of their own. On the north-east corner, the High Ranges begin with Sholeamalla or Currincollum (8,480 ft.) and run in a south-west direction to Gennewurra, thence still south-west to Corichy and thence to Puddikut (6,000 ft.) near Davycolam. From Puddikut, the line of walls runs in the same direction to Coorkacomboo (7,000 ft.); then running slightly more west, the Hills rise to Chockenamudy (7,300 ft.) from which the course is north-west to the gap where the Moonaur disappears. From the gap the Hills run slightly south-west and then north-west to Worrayparathundoo; thence north to Perumputty Kullo (6,500 ft.) from which again the direction is north-east as far as Aunymuddy.

"From Aunymuddy the course is much broken and runs irregularly to Eravimalla where there is a deep dip into the valley of the Eravimalla Aur which separates the Eravimalla plateau (also known as Hamilton's plateau) from the

Perumalmala plateau. From this valley there is a steep rise to the north-west to Katoomalla (8,100 ft.) west of Katoomalla, the High Ranges comprise the plateaux within Chemmun Peak (7,100 ft.), Payratmalla (7,400 ft.) and thence eastward to Coomarikul (8,050 ft.). of Coomarikul and Katoomalla lies the low Unjenaad Valley which separates this part of the High Ranges from the highlands on the slope of Tertamalla, on which are situated the hill villages of Kelandoor, Kandal, Pootoor and Perumalla at an average elevation of 5,000 ft. In its upper part the Unjenaad Valley is also called the Thallayar Valley where the elevation is above 4,000 ft; sloping gradually to the north-east, it opens out into the Unjenaad Valley proper which is a level terrace two or three miles wide and five miles long lying at an elevation of 3,000 feet. Below and to the east of Unjenaad the land slopes down rapidly to the British frontier probably at about 1,500 or 2,000 feet, a very feverish tract containing no resident propulation.

"To the south-east of Tertamalla runs a ridge separating the water-shed between Unjenaad and Moonaur and joining the high peaks bordering the Pulnies at a peak called Allear Kunnoo (6,900 ft.). From Allear Kunnoo the course is bounded by a curve north-north-east to Pambadyshola (8,000 ft.) and then runs north to Kuduvurratukal (6,600 ft.), where there is a deep dip into the Wuttawudda river, and here the high land may be said to cease. From Allear Kunnoo southward, the line to Sholeamalla is marked by clear-cut cliffs averaging about 8,000 feet. Exclusive of the low Unjenaad Valley which is not above 3,100 feet, the area within these boundaries may be roughly estimated at 400 square miles with an elevation of one of the peaks reaching as high as 8,837 ft."

Properly speaking, this tract can hardly be called a plateau. It is rather a succession of high hills with deep valleys between. From the High Range the land slopes in three directions to the Anchanad valley on the north-east,

to the Kandanpara valley on the west, and the Cardamom Hills and Pirmede on the south. The boundary between Travancore and Tinnevelly is here very marked. steep slopes covered with forests towering up above Mlappara as boldly as the Western Ghats rise above the low country. Sloping gradually to the north-east the Anchanad valley opens out into a levelled terrace five miles long and two to three miles broad with an elevation of not more than 2,000 ft. To the north, the valley slopes down gradually into the British frontier. On the west of Anamudi the slope is sudden, almost precipitous, descending to a great depth. To the south of the High Range the land spreads out into a hill-plateau of considerable extent. Near it are the Cardamom Hills the greatest height of which is 7,900 ft. and the average height over 5,000 ft. Further south are the Pirmede Hills averaging 2,800 ft, with one peak of 4,780 ft. At a considerable distance to the south of Pīrmēde are the Ponmudi Hills rising to an average height of 3,200 ft., one of them going up, however, so high as 6,000 ft. In the south the mountain range is of no great breadth except at a place called Muthukulivayal where the Kotha river runs across a plateau about ten miles long and six miles broad at an elevation of about 4,400 ft. For the rest of its length towards the south the mountain backbone is a mere ridge sloping down on either side and running north-north-west and south-south-east, at an elevation of about 4,000 ft., with isolated peaks, the most important of them being the Agastyar Peak (6,200 ft.) and the Mahēndragiri Peak (5,500 ft.) The latter is the southernmost peak of the western ghats. The Ghats abruptly end near the Aramboly Pass in South Travancore. Among the important of the isolated hills in the south are Maruthvāmala in the Agasthīswaram Taluk, Vēlimala in the Kalkuļam Taluk and Mūkkunnimala in the Neyyattinkara Taluk.

Many are the passes across the mountains between Travancore and the British districts on the east.

The Bōdināickannūr Pass. This is the northernmost of the passes. It connects Pōdināickannūr in the Madura district with the High Range and leads to Dēvikuļam, Mūnnār, Chitrapuram and Kōthamangalam.

The Thevaram Pass connects Thevaram with the Cardamom Hills. It reaches the top of the Ghats by a very steep ascent. This pass is little frequented as it traverses a very wild and mountainous region.

The Kambam Pass, though rugged for one and a half miles, is one of the best across the hill tract between Travancore and Madura. Through this pass much trade passed in ancient days to and from Thodupula, but the route is practically closed now, the trade having been diverted along better routes.

The Gūdallūr or Kumili Pass connects Pīrmēde and Kānjirapally with Kambam and Uttamapālayam. Through this pass great traffic passes from the British parts to the planting district of Pīrmēde. A road strikes off from this pass at Gōpichetty Thāvalam, three miles west of the Munjamulla Periyār and proceeds by the Codamurutty Ghat, a steep and difficult acclivity, to Īrāttupētta. It was closed for traffic on account of the facilities which it afforded for smuggling. South of Gūdallūr the Šivagiri Pass ascends the hills to Šabarimala, but it is of little importance and is only frequented by cattle.

The Mekkarai Pass lies north of Puliyara and connects Achenköil with Pumblyapatam and Shenkötta. The ascent is difficult for a mile from the plains stretching along the eastern side of the mountains, but a cart-road with easy gradient has now been constructed by the Forest Department up to the Achenköil temple.

The Frienkāvu Pass is one of the principal passes in Travancore. It has an easy ascent from the open country on the east. The Kannupally pass in the Shānār Ghat lies

south of the above pass. It ascends four miles and then descends towards Kulathūpula. It is little used.

The Aryanad Pass. This was in good condition in former times, but it is now closed.

The Mottacchimala Pass which lies in the Eridge Estate is used by coolies and hill-men.

There is a pass from Kalakād to Muthukulivayal and another from Kadukkarā to Shoravalli Madam, which are used by the inhabitants of the neighbouring tracts.

The Thirukhurangudy Bridle Pass is much used by estate coolies. A pass through Miranjimea Estate ascends the mountains from Paṇagudy.

The Āramboly Pass. This pass forms the best entrance into Travancore. The (runk road from Tinnevelly to Trivandrum passes through it. The pass has played a great part in the military and strategical history of Travancore.

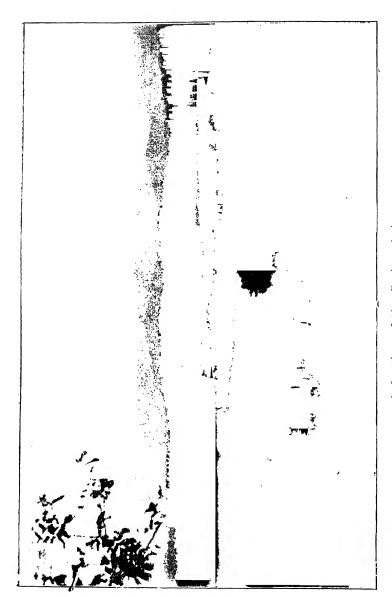
The Yedamala Pass lies across the group of hills which form a ridge about two miles to the north-east of Marutyāmala.

Few countries of similar extent possess so many rivers as Travancore does. The country is intercepted by numerous rivers which, rising in the ghats, flow westwards at short distances Rivers. from one another. As their sources are often at high elevations, the streams come down gushing through a rugged country, flowing through dense forests and falling down in cataract after cataract. In the upper courses the beds are generally rocky. The descent being rapid, navigation is impossible in the upper reaches; nor do the streams afford facilities for irrigation. Some of them possess great potentialities as the dip is so favourable for the generation of electric power. In the plain country the streams are favourable for rafts and canoes, although in times of flood the current is very strong. The larger

streams bring down immense quantities of fertilising silt. As the country tapers down from the north towards the south, the southern rivers are smaller in length than those of the north.

The Perivar. The Perivar is the longest and largest river in Travancore. It rises in an extensive forest in the Sivagiri peak sixty miles south of Devikulam at an elevation of 8.000 feet. It then traverses a plateau, plunging down between immense cliffs of rock. After a course of ten miles northward it is joined by the Mullayar at an elevation of 2,800 ft. It then turns due west and continues in that direction for about ten miles over a sandy bed. About seven miles below Mullayar Thavalam it finds its way through a gorge. Here stands the Periyar Dam. By the construction of the dam the river is caused to back up for a considerable distance as far as the Valukkappāra Thavalam, and all the low-lying land on the north bank of the river is submerged, the water extending up all the side valleys and reaching to within a mile of Kumili. From here a channel over a mile in length is tunnelled through the hill-side and the water conveyed to one of the streams that go to feed the Vaigai river on the other side of the ghats.

After a winding course of eight miles below the dam, the river reaches Vandiperiyār and then passes through another narrow gorge, below which it is joined by the Perumthura river. Lower down, it is joined by the Kattapanayār and still lower by the Cheruthoni or Chittar. Further down, it receives the Perinjankutty stream and a few miles still further down, the Muthirappula river. In its upper course the waters of this stream is divided and made to flow through a tunnel cut through solid rock for the Pallivāsal Hydro-Electric Scheme. From the Muthirappula Junction the Periyār descends eight hundred feet within the next four and a half miles and flows west-northwest. There is also another cascade at Kokkaranippāra



A Section of the Periyar Lake.

where the water falls from over a cliff one hundred feet high. After flowing about eight miles, it pours under a large The water passes into a chasm and emerges again only after considerable distance. From Karimanal, ten miles below its junction with the Muthifappula river, the Periyar becomes navigable for boats. It is then joined by the Deviar and passes the once populous village of Nēriamangalam, where now stands a beautiful bridge which was opened to traffic by His Highness the present Mahārāja. From this place it flows for about eight miles. when it unites with the Idiyara or Idamala river. From here as far as Malayāttūr the Periyar, now four hundred yards wide, is fed by numerous streams. Passing Malayattur, and then after a winding course of fourteen miles. the river reaches Alwaye, where it divides itself into two branches. The principal branch flows north-west and expands itself into a broad sheet of water. The other takes a southerly direction and is broken up into a number of small channels falling into the lake near Verapoly.

The Periyar flows through the taluks of Pirmēde, Dēvikuļam, Thodupuļa, Mūvāttupuļa, Kunnathunād and Parūr. The chief places on its banks are:— Vandiperiyar, Nēriamangalam, Malayāttūr, Chērānallūr, Kālady, Ālwaye, Uļļinād and Verāpoly. The total length of the river is one hundred and forty-two miles of which for the last thirty-five miles only does it pass through inhabited tracts. It is navigable for boats for sixty miles above its mouth.

The Mūvāttupula River. This is formed by the union of three streams, the Thodupula, the Vadakkan and the Kōthamangalam, which rise on the western slopes of the Nagarampāra Hills and, running in a westerly direction, unite at the town of Mūvāttupula, from which the river takes its name. It flows for about eight miles in a westerly direction and then turns south and passes Rāmamangalam, Piravam and Vettikkāttumukku. At the last mentioned place it forks, one branch running in the direction of Cochin

and the other flowing into the Vēmbanād lake. This river is sixty-two miles long and is navigable for boats for forty two miles from its mouth.

The Minachil River. This also rises on the Pirmöde plateau, a little above Nallatannippära, at an elevation of 3,500 feet. It runs first north-west and then west and after seven or eight miles is joined by the Kavana stream which rises on the slopes of Mēlakāvu. After a course of two miles due south the combined stream receives the Codamurutty river and passes by Pūnjār. Leaving the forest boundary at Īrāttupētta it takes a south-easterly course and passing along Kondur, Ļālam, Kidangūr and Kōttayam, its waters, dispersed in minor channels, unite with the Vēmbanād lake by several embouchures. The length of the river is thirty five miles and it is navigable for boats for twenty-six miles.

The Manimala River takes its rise in the Möthavara hill and drains the valley to the west of Amritamala. After flowing for about six miles it is joined at Kuttikal by the Nyārampullār and then by several small streams before it joins the Pampa River. The length of the river is sixty-two miles. The villages of Peruvantānam, Mundakayam, Yerumakuļi, Maņimala, Kallūppāra, Kaviyūr, and Thiruvalla, are situated on its banks.

The Pampa or Rānni River. It is formed by the junction of three streams. Taking its rise from Pulichimala, the original stream is joined by the Alutha which rises on the Pīrmēde plateau. The two together form the Valiya Ār which after a course of six miles westward falls from a height of ninety feet. The river is then known as the Perunthēnaruvi, which is joined a little lower down by the Kakkād Ār. The Kallār which rises in the valley north of Chempalakkara also joins it before it reaches Rānni. The combined river now called the Rānni leaves the forest area at a powerful stream two hundred yards broad. It runs west for about thirty miles and is joined by the Manimala river. Six or eight miles lower down, the

Kuļakkada river joins it and after a course of about twenty miles it flows into the Vēmbanād lake. The total length of the river is ninety miles. The chief places on its banks are:—Rānni, Kolamchery, Āranmuļa, Chengannūr, Mānnār and Puļinkunnu. The river is navigable for forty five miles.

The Achenköil or Kollakadavu River. This starts from the western slopes of the Thuvalmala (Coonumcal square rock) and Rāmakkal peak. It passes by the Achenköil village and after receiving numerous feeders, leaves the forest area four miles above Kōnniyūr. This river runs a course of seventy miles, first north-west and then west, and joins the Pampa near Vīyapuram. It flows through the taluks of Kunnathūr, Māvēlikara, Thiruvalla and Kārthikappalļi. Kōnniyūr, Omallūr, Pantaļam, and Kandiyūr are situated on its banks. It is navigable for boats for forty miles and also affords facilities for irrigation.

The Kallada River. The union of five large streams issuing from the foot of the ghats forms the Kallada river which flows through the taluks of Pathanapuram, Kunnathür, Kottārakara and Quilon. The main branch is the most southerly and is formed by numerous streams that rise on the plateau stretching from the Alavrkurichi peak to Chemmunji. Flowing west it is joined by several small streams. After leaving the Kulathupula valley and running five miles, it passes through the village of that name. Here the river is about eighty yards wide in hot weather. Three miles lower down it falls from a height at Minmutti. It is then joined by the Chenthroni and Kalduritty rivers. Passing Ottakkal where it falls again in another cataract, the river flows for about ten miles in a west-north-westerly direction and leaves the forest area three miles above the town of Punalur. Turning north and bending a little northwest, it passes by Pathanapuram, receiving the Chalikkari Ar a little lower. It then flows in a westerly direction and then south-west until it falls into the Ashtamudi lake. Its length is seventy miles of which twenty-five

are navigable for boats. The chief places on its banks are:— Punalūr, Pathanāpuram, Kuļakkada, Kunnathūr and Kallada.

The Itthikkara River. It rises from the low hills situated near Madathurakāṇi. After small accessions it leaves the forest area near Maṇarkoda and, proceeding in a northwesterly direction, is joined by a large stream. From there it flows south-west and west and falls into the Paravūr backwater. Its length is thirty miles. Chadayamangalam, Paḷḷikal, Kummallūr and Nedumgōlam lie on its banks.

The Ättingal or Vāmanapuram River. It takes its source from the peak of Chemmunji on a spur running out from the main range of the Western Ghats as far as Ponmudi hill. It then descends rapidly and runs at first in a north-westerly direction, then west for twenty three miles between high banks and over a sandy bed till it passes the village of Vāmanapuram. From here it runs south-west and empties itself into the Anjengo estuary after a course of thirty-five miles. Nellanād, Vāmanapuram, Attingal, Kūntallūr and Chirayinkil are the chief places on its banks.

The Karamana River. This descends from the foot of the ridge to the north of the Agastyar Peak and flows through a rocky bed, narrow in certain places, confined by high banks through a comparatively wild, woody and uneven country. Its direction is first west, then south and finally south-west. It flows into the sea at Pünthurai, three miles south of Trivandrum, after a course of forty two miles. At Aruvikkara, about eight miles to the north of Trivandrum, this river has been dammed up for the Willingdon Water Works.

The Killiyst is a small stream which rises in the Nedumangad hills. Its course is generally towards the south and after flowing for fifteen miles joins the Kafamana river at Thiruvallam three miles south of Trivandrum. This irrigates rive lands by means of anicate and channels

taken off from it and supplies water to some of the principal tanks in the capital.

The Neyyār. It rises on the slopes of the Agastyar Peak and runs in a southerly direction. Passing downward in a cataract three hundred feet high, it flows over a partially rocky bed confined by steep banks, and discharges itself into the sea near Pūvār, where a small lagoon is formed. Neyyāttinkara is an important town on its bank. Its length is nearly thirty-five miles.

The Kulithurai or Tāmraparni River is formed by the union of the Kōthayār and the Paraliyār. The latter takes its source from north of Mahēndragiri. Passing through a wild tract of country it enters the plains at Thiruvattār and flows in a south-westerly direction. After a course of twenty-three miles from its source it joins the Kōthayār. It flows through the two taluks of Kalkuļam and Viļavancōde and reaches the sea at Thēngāpataṇam. The total length of the river is thirty-seven miles. Thiruvattār, Munchira, Kulithura, and Ārudēśapattu lie on its banks. It is intercepted by a dam at Ponmana.

The Kothayar rises on the southern extremity of the Muthukulivayal plateau and to the east of Valiyamala Peak. It descends slowly at first and then more rapidly. After a course of fourteen miles it reaches the Mottachi-Valley. It continues to descend with rapidity tumbling over falls and eddying among huge boulders. In the lower stages of its course it flows leisurely and is joined by two streams rising on the Motavan Potta and the Thacchamala hills. Lower down, the river is dammed at Fechipara and its waters diverted by channel to join the Paraliyar at Ponmana, from where the combined waters of the two rivers are led by a network of channels to irrigate the paddy fields of Nanjanad, and Edanad. Four miles from Pechipara it is precipitated over the Thripparappu falls. The Paraliyār joins it above the town of Kulithura. The total length of the river is thirty-seven miles.

The Vadaśśeri River is also called the Palayar. This is the southernmost river in Travancore. Many small streams combine to form this river. One of these rises south of the Mahendragiri Peak and passing down a steep gorge reaches the low country a little to the west of Anandapuram. Another rises in the Kunimuthu Chōla Estate and a third passes by Black Rock. All these pass out of the forest before they unite to form the main river. The Palayar flows through the taluks of Thōvāla and Agasthīśwaram in a south-easterly direction and falls into the Maṇakkudi lake after a course of twenty three miles, passing the towns of Bhūthapāndi, Kōttār, Nāgercōil, Thālakudi and Suchīndram. This river is very useful for irrigation.

There are, besides the above, a few other rivers which deserve mention though their course is mainly outside Travancore.

The Chālakudy or Kōtassōri River. This rises far north in the ghats beyond the Travancore frontier. "It does not touch Travancore till it has approached within three or four miles of the Athirapula fall. At the point where it begins to mark the boundary between Travancore and Cochin it foams over a broad cataract, a grand river more than two-hundred yards in width". There are two other cataracts called Churan and Vannan. The floating of timber down the river is greatly obstructed by these falls. Still lower down there is another fall called the Varamban. After this the river flows with a strong current. At Erattamukhom it leaves the Travancore territory. The area of Travancore forests on this river bank is only eleven square miles.

The Anchanād River. It takes its origin in the Thalla-yar valley. For some distance it flows over an elvation of 7,000 feet and then over 4,000 feet for a distance of about eight miles. Here it receives two streams one flowing from the Erarimala plateau and the other from the Perumala. At Nacchivayal the elevation is 3000 feet. For the next five miles it falls over rocks, and five miles still lower it enters

the British territory. Just above this it is joined by the Chinnar. This river flows only for a small distance within the State.

The Hanumānnadi River.* This river starts from the south of Sulekoil Mētiu (4,791 ft.). For some distance it forms the boundary between Travancore and the district of Tinnevelly. Then it runs through Travancore territory up to the north-eastern corner of old Mēkaře Pakuthy (Achenpudūr) and then flows through Tenkāsi. It again enters and runs through Travancore territory and joins a small stream called Chittar river at the tri-junction of Ayikudi, Kļāngād and Tenkāsi. It is useful for irrigation purposes.

Travancore has an extensive backwater system which stretching from Trivandrum to Parür, extends through Cochin territory and further on to Ponnani the British district of Malabar. in Backwaters. distance of over two hundred miles. total area of this backwater system amounts to two hundred and thirty seven square miles of which one hundred and fifty seven are in Travancore. The breadth is extremely unequal. spreading into a wide expanse in some places, while at others diminishing to a contracted stream, and presenting on the whole a most irregular and broken figure. The backwaters are connected by canals in certain places. The whole extent is navigable by canoes and stream boats during all seasons of the year. A narrow strip of land, of a width varying from seven miles to two furlongs separates them from the sea into which they pour their waters by several outlets. The bed of the lakes consists generally of a thin layer of soft black mud, incumbent on a fine dark sand. On account of the large volume of freshes received during the monsoons the water is comparatively free from saltishness except

[•] There is another Hanumannadi which rises from the Makendragiri peak and flows eastward. As the river is of no use to Travancore, it is not described here.

in the immediate vicinity of their mouths. In some places they are always so in the interval of the tides. The places where these backwaters meet the sea are called Alis or Polis, according as the opening is permanent or temporary. The chief Alis are those at Quilon, Kāyamkuļam and the mouth of the Periyār; and the Polis are those of the Vēļi, the Paravūr and the Edava lakes. The flood tides flow over the bars into the lakes and cause the larger of them to rise to an average height of about two feet. The extreme height of this tidal rise is three feet and the current flows at the rate of two and a half miles an hour.

The cocoanut palm flourishes on the margins of the lakes which are in many places pressed by a net work of the many fibred roots of aquatic plants, or thickly shrouded with the projecting heads of reeds. The different parts of the backwaters are known by distinct names. Narrow in the south they expand in breadth, as a general rule, towards the north.

The $V\bar{e}li\ K\bar{a}yal$ is about three miles to the north of Trivandrum. It is three-fourth of a mile long and half a mile broad. On one side, the shore is overhung by a high cliff and the other side is skirted by an extensive range of cocoanut plantations.

The Katinamkulam Kāyal. This backwater is a little larger than the Vēļi. The Pārvati Puthanār connects this lake with the Vēļi Kāyal.

The Anjengo Lake is formed by the waters of several streams the chief of which is the Vāmanapuram River. It takes its name from the town situated on its shores. The extreme length of the lake is twelve miles and breadth two and a half, the average breadth being three-fourth of a mile. It has an area of eight square miles. It is connected with the sea by a narrow bar.

The Edava and Nadayara Kāyals. These two small lakes lie further north. They are connected with the sea by bars which are opened during the rainy season.

The Paravür Kāyal. This lake, though small, is very deep and dangerous on account of its being very close to sea and exposed to sudden land breeze. It has a bar which opens in the rainy season. The Ithikara River flows into this lake.

The Ashtamudi Lake. Extends from Quilon northwards. The name Ashtamudi is derived from the fact that the lake branches off into eight creeks, known by different names. One portion near the Quilon Residency is called the Aśrāmam Lake and another close to the Cutchery the Kurīpula, the "Loch Lomond" of Travancore. About two miles north of Quilon the water opens out into an estuary into which the Kallada river empties itself. Its extreme length is ten miles and breadth nine miles, the average breadth being two miles. It covers an area of twenty square miles. There is an outlet to the sea at the western end, which is known as the Nīndakara Bar. It is of sufficient depth for small vessels and barges. An iron bridge 1,3364 feet long now spans the backwater.

Kayamkulam Lake. This lake is nineteen miles long including its expansions at the southern and northern extremities and has an average breadth of a mile and a half. It has an area of twenty square miles. It is very shallow and has an outlet at the Kayamkulam Bar which is always open.

The Vēmbanād Lake is the general name given to the large expanse of back water which stretches from Alleppey to Cochin. Some parts of it are known by special names. Its length is fifty two miles and its breadth nine miles in some places. The average breadth is two miles. The lake covers an area of seventy nine square miles. In some parts it is very deep and at other places rather shallow. Many streams discharge themselves into this lake, the principal ones being the Pampa, the Mūvā tupuļa and the Mīnachil rivers. It borders the taluks of Ampalapuļa, Shērtala, Vaikom, Kōttayam and Changanāssēry. This is

the largest lake in Travancore and has an island in the centre called Pāthirāmaṇal with cocoanut plantations.

Among other backwaters may be mentioned, the Kodungallür Kāyal in the taluk of Parür. It is nine miles The breadth varies fantastically, being extremely small in certain places and considerable in others. It covers an area of ten square miles. It has an outlet at Cranganore Bar which is always open. There are a few freshwater lakes which deserve mention. The most important is the artificial Periyar lake which extends over thirteen square miles above the Perivar dam. There is a natural freshwater lake at Sāsthānkōtta in Kunnathūr and another in the Neyyattinkara taluk. The Manakkudi Kayal in the taluk of Agastiswaram is a small lagoon formed by the Palayar before it discharges itself into the sea. Thengappattanam lake is an estuary at the mouth of the Kulitura River. There are besides the Punthura lake and the Pūvār lake which are of minor importance. They are small estuaries formed by the rivers.

There is an ample extent of sea-coast measuring one hundred and sixty eight miles, with good ports affording safe anchorage to ships. There are also Coast line. some points of land projecting into the sea, viz., Cape Cömorin, Muttam. Covalam and Thangaśśēry. At Varkala are cliffs overhanging the sea. The last point of high land along the coast occurs on the southern side of the embouchure of the Ashtamudi lake. From this point northward the coast is low and flat.

Near Alleppey there is a mud-bank ten miles in length at a distance of three miles from the shore. Between this mud-bank and the coast, ships can ride in twenty fathoms of water undisturbed by agitation of the sea. The position of the bank is subject to great fluctuations. Further north a ledge of submerged rocks appears to run into the

sea for some distance opposite to the northern branch of the Periyar at Pallipuram.

The coast line is indented by the mouths of the rivers Palayār, Thāmraparni, Neyyār and Karamanay rivers. The lakes of Ashtamudi, Kāyamkulam and Kodungallūr communicate with the sea by narrow and shallow mouths capable of admitting small craft. The sea has made inroads upon the coast in a few places, as for example, at Porakkād and Thrikunnapula. The tides are irregular both as regards direction and duration. The flood stream lasts generally for four or five hours. The rise is very small, the maximum height being three feet and the average eighteen inches.

There are some good ports with convenient anchorage, Alleppey, Quilon, Trivandrum and Colachel being the most important.

The west coast from Mangalore to Cape Comorin has the dampest and the most uniform climate in India, if not in the whole world. While open to the westerly ocean winds which, to a large extent, mitigate the tropical heat, the country is shielded by the ghats from the desiccating winds of the table-land to the east and north. It is watered almost uniformly by the numerous streams that have their sources in the ghats and flow into the backwaters and lakes that intersect the seaward margin. The vegetation has all the luxuriance associated with the tropics. Cocoanut palms and rice-fields fill the coast and the valleys, while the gorges and slopes of the loftier hills and the ghats are covered with dense and luxuriant forest.

The above factors individually and collectively account for the high vapour contents and humidity of the atmosphere and the small diurnal variations of temperature

^{*} The following account of meteorological conditions was compiled by Mr. V. Sivaramakrishna Aiyar, M. A., Government Meteorologist.

which form the striking feature of the climate of Travan-Table I* gives the average vapour contents of the atmosphere, the average diurnal range of temperature and other relevant data from month to month for Trivandrum. based on the records of the Trivandrum Meteorological Observatory. In the absence of regular weather observations it is not possible to give such data for other parts of the country. Nevertheless it is reasonable to infer that Trivandrum is representative of the climate of the major part of the State with the exception of the Pirmede plateau and the High Ranges to the north and the small tract of table-land to the south-east of Trivandrum, corresponding to the old Padmanābhapuram Division where the topographic features gradually begin to resemble those of the adjacent district of Tinnevelly in its scantiness of rainfall and persistence of dry winds for the major part of the year. The climate of hill sanatoria like Munnar, Pirmede, Ponmudi and Muthukulivayal is largely controlled by their elevation and the consequent cooler temperature and lower vapour contents. From observations taken during the years 1855 to 1865 A. D. at the Agastyar Peak, where there was then a Government Observatory, it was found that the daily range of temperature there is of the same order as at Trivandrum for the different seasons, but the absolute temperature is about 25°F. lower throughout, the elevation of Agastyar Peak being about 6,200 ft. It is reasonable to infer that this will be the case for the other hill stations also, i. e., the average temperature will be lower than at coastal stations by about 4°F. per 1,000 ft. of elevation for each season. It is now known from the investigations of Sir Leonard Hill and others that the bracing effect of a climate is best judged by the extent of evaporative cooling on the human skin, the contributory factors being temperature, humidity and wind. The average high temperature, high humidity and feeble wind prevailing in the major part of the country during

^{*} For Tables I to VII Vide pp. 78-84 infra.

more than half the year are all adverse to evaporative cooling and account for the enervating effect of the climate.

The seasons in Travancore are mainly controlled by the two periods of rainfall, viz., the south-west monsoon from June to August and the retreating Seasons. or north-east monsoon from October to The driest and the coolest December. months of the year are January and February being followed by summer, approximating to tropical severity, during the months of March, April and May. During the latter part of this period summer storms of the local type occur during afternoon hours accompanied by lightning and thunder and reversal of surface wind, and there is a transition period from the middle of May to the first week of June, when the summer storms often merge into the south-west monsoon with or without any characteristic break, the rains occurring during this period being associated with the advance monsoon type. The south-west monsoon with its characteristic gusts and squalls prevails with varying degrees of intensity over the whole country from June to August, the month of maximum precipitation being June, for the Trivandrum and Quilon Divisions roughly and July, for the Köttayam and the High Range Divisions. The monsoon weakens distinctly towards the middle of August and, the latter part of August as well as the whole of September is generally a period of intermittent rain with variable winds, September being more often sunny than cloudy. When the pressure distribution over the Bay of Bengal and the Arabian Sea is reversed towards the end of September, resulting in a low pressure area towards the Arabian Sea and one of high pressure towards the east and north of the Bay of Bengal, the conditions are favourable for the north-east monsoon which constitutes the only source of rainfall for the Coromandel coast. Due to the obstruction offered by the ghats, this comparatively feeble

monsoon current is unable to produce any appreciable precipitation in the central and northern areas of Travancore, while in Southern Travancore, where the line of the ghats is narrow and broken up and the current from the Bay of Bengal has easier access, this monsoon produces even more precipitation and is more important from the agriculturist's stand-point than the south-west monsoon. Whereas in Munnar the south-west monsoon rainfall contributes 80 per cent. of the annual precipitation, in Pēchipāra, this monsoon contributes only 40 per cent., while at Aramboly and Avikudi about 60 per cent, of the annual rainfall occurs during the north-east monsoon period. During the latter half of December dry and settled weather sets in accompanied by dew in the grass and mist in the valleys. There is a marked difference between grass temperature and temperature in shade during this season on account of the vigorous radiative cooling of the ground exposed to the clear sky. February is the driest part of the year having the maximum number of days of perfectly clear sky, and the cycle of seasons repeats with the advent of summer in March.

Table II gives the essential climatological data for Trivandrum for the four seasons. Similar data for other stations are not available.

The State has a good net-work of rain-gauging stations and rainfall data for different parts of the State are available now for the last thirty to Rainfall. fifty years in the case of most stations. Observations have been made in Trivandrum for practically a century. Rainfall data have also been occasionally collected from the large number of tea and rubber plantations in the State, though it is not possible to say how far these data are reliable in the absence of departmental inspection of such stations. The following are the essential features of the territorial and

seasonal distribution of rainfall in the State based on the average rainfall statistics available for each area:—

- (1) During the period of the south-west monsoon, the rainfall at stations along the coast shows a progressive increase from the Cape to Paiūr. A similar and even more marked increase is noted as we proceed from the coast towards the chain of ghats. The data in Table III for representative stations will bear out the above statement.
- (2) The regions of greatest precipitation during the south-west monsoon period are the plantation areas near about Pirmēde and the Śabarimala slopes, such as, Kallār (225"); Ānakuļam (195"); Fairfield (130"); Mundakayam (125"); and Lāhai (100").
- (3) There are reasons to infer that the precipitation on the hills is greatest at an elevation of about 4,000 feet, the monsoon current diminishing in strength at further heights. Broun's observations at Agastyar Peak (7,200 ft.) and the adjacent hills at a lower level, such as Attrimalai (4,000 ft.), show that the monsoon rainfall in the latter station is about 200" while in Agastyar it is only 150", i.e., about 25 per cent. less. The same difference is noted between Pīrmēde (3,500 it.) and Mūnnār (5,000 ft.). (Also Vide Table III).
- (4) A gap in the ghats influences the rainfall to a very marked extent. Thus in the Kumiļi gap the monsoon rainfall is 38.5", which is only a fourth of that at Pīrmēde. Similarly, the rainfall at Shenkotta on the eastern side of the Ārienkāvu Pass is 21.7", while that at Ārienkāvu within a few miles of it is 58.5".
- (5) Stations such as Chinnār and Marayūr in the High Ranges, facing the eastern slopes, are practically shut out from the south-west monsoon current, the monsoon rainfall at Chinnār being as low as 7.7".
- (6) The precipitation during the north-east monsoon months is more or less of the same magnitude throughout all stations in the Köttayam and Dēvikuļam Divisions (from

20" to 25") irrespective of their proximity to the ghats. In the region near Shenkotta and in South Travancore, however, this rainfall is comparatively heavier, constituting 50 to 60 per cent. of the annual rainfall. Barometric depressions originating in the Gulf of Mannar or the Bay occasionally develop into storm weather during this period, and, when crossing the Arabian Sea, produce heavy rainfall in South Travancore particularly. Cyclones also, though rare, affect this area only during this period.

(7) The summer storms in April and May contribute an appreciable portion of the rainfall, being between ten to twenty per cent. of the annual rainfall. They are, from their very nature, local and irregular. There is no relationship between the intensity of the summer storms and the monsoon that follows it. The severity of a summer can be judged from the nature of the thunderstorm. In May 1924 Trivandrum had a hail storm which was of exceptional severity, the wind velocity during the storm going up to sixty miles per hour. Table IV gives the seasonal distribution of rainfall in the State for each division.

The analysis of the rainfall for the two monsoon seasons shows that the south-west monsoon was below fifty

per cent. of the average in the major part of the State during 1860, 1894, 1899 and 1918 and above fifty per cent. of the average during 1897, 1923, 1924 and 1933. Like-

wise the north-east monsoon was below fifty per cent. in 1922, 1925 and 1932. The floods of July 1924 were the most extensive and disastrous in recent memory, while that of 1933, though heavy, was confined to the Trivandrum Division. Years of drought of the character of 1860 have fortunately never recurred. An analysis of the ninety nine years of rainfall data available for Trivandrum does not justify the formulation of any working rule for fixing approximate epochs of excess and drought in the State. They do not

appear to be related to the sunspot cycle either. In no country has any such correlation been satisfactorily established yet. The annual rainfall, moreover, is not a correct index. The total may be near the average, but a whole season might have badly failed. From the agriculturist's stand-point the seasonal distribution is even more important than the total. The fickleness of weather is chronic.

Except in the hill stations, the wind velocity in the State is, on an average, lower than in the adjacent east coast of Tinnevelly and Madura. When Surface winds. the south-west wind ushers in the monsoon by the middle of May, the character of the wind is altered both in regard to its moisture contents and its steadiness of direction. But the wind velocity except during the gusts and squalls that accompany the monsoonish precipitation is never more than ten to fifteen miles per hour. During the months of July and August the average wind velocity appreciably increases and is at its maximum in the beginning of August, the velocity in hill stations as well as in the gaps in the ghats, such as Aramboly and Shenkotta, being of the order of thirty to forty miles per hour during this season. The direction of the monsoon winds varies from north-west to south-west. winds die down in September and, due to the general reversal of the wind system that occurs before the north-east monsoon sets in, the wind velocity in October is very low. Feeble north and north-east winds accompany the retreating monsoon in October and November, though in coastal taluks like Trivandrum the resultant direction is considerably modified by the sea-breeze during day time. The wind velocity continues to be feeble and the surface wind is from north to north-west during November and December. With the advent of the dry season in January, there is almost perfect calm except in coastal stations affected by land and sea breezes and the winds continue to be feeble and variable till

the middle of May, when the monsoon current appears as explained at the outset. Table V gives the direction and velocity of the surface wind in Trivandrum for each month. Similar data for other stations are not available.

With the advent of aviation, the study of winds at different heights (direction and magnitude) has acquired great importance and since the opening of a Pilot Baloon Station in Trivandrum in Upper winds. December 1928. Travancore has been contributing its share towards such study. Table VI gives the monthly means at 8 A. M. of the winds at standard heights at Trivandrum, based on the data available hitherto. It will be seen that the surface wind has little or no relation whatever with the movements of the free atmosphere. It is found that the depth of the south-west monsoon current, when in full swing, is of the order of one mile and the layer of air above this current is invariably moving in the opposite direction during this season. During thunderstorms the air shows vertical movements as well. The passage of a depression during the north-east monsoon generally reveals itself in sufficient time for making a forecast by the characteristic changes in the balloon trajectory. Balloons have been followed in Trivandrum to a height of ten to twelve miles under exceptionally favourable conditions and to an average height of three to four miles daily. The technique of this method is sure to improve with the progress of the demands of aviation.

Fortunately a cyclone is a rare visitation in this country on account of the formidable defence offered by the ghats. Cyclones developing in the Cyclones. Arabian Sea during the monsoon months, June to August, invariably travel further away from this area, i.e., towards north or west, and there is no record of any cyclone having affected this State

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during the south-west monsoon. During the period of the receding monsoon, however, depressions frequently form in the Bay of Bengal and take a north or north-westerly course. If this developes into a cyclone, as it occasionally does, and touches the Coromandel coast at a point north of Nagapatam, this country is hardly affected. If, however, it travels further south, the Central and Southern Divisions of Travancore are likely to be in their path. One such storm is reported to have occurred in November 1845. The storm of the 30th November 1922 is, however, within the memory of many. It affected a large area of the country, particularly in South Travancore. The following are its principal meteorological features:—

Barometric depression from normal ...0'5"

Passage of cyclonic centre across Trivandrum ...5.30 A. M. Maximum wind velocity during storm ...50 to 60 miles per hour.

Duration of storm before and after backing ...3 hours. Speed of travel of storm (Judged from similar offects reported at Nagercoil earlier and at Quilon later than

at Trivandrum) ...7 miles per hour.

Precipitation during period of storm ...2:4".

Several stations in South Travancore gauged 5" to 7" during the storm. Telegraphic service was interrupted for two days after the storm and the whole avenue of the Main Southern Road from Trivandrum to the Cape was badly affected.

There was a comparatively feeble storm on the 9th November 1923, which crossed the southernmost corner of the country in less than an hour. Apart from causing heavy rain before and after the passage of the depression, it did not produce any material havoc.

Table VII gives a summary of interesting meteorological events of rare occurrence recorded in the Trivandrum Observatory from time to time.

MONTHLY CLIMATOLOGICAL DATA FOR TRIVANDRUM.

| | | - | | | [8] | | | - | |
|------------|-----------|------------------------------------|---------|----------|---------------------|---|---|-------------------------------|----------------|
| .soM | Month. | Mean Tem Persture— 24 hours. | mumixaM | .muminiM | Mean Diurn Range | Mean Aqueous Pressure— 24 hours. | _ | Mesn Humidity St hours. | Mean Humidity— |
| | January | 76·5°F | 83.87F | 73.0°F | 10.8°F | .999.0 | | 73.8% | |
| 67 | February | 0.82 | 85.4 | 74.3 | 11.1 | 0.685 | | 72.5 | |
| 673 | March | 80.3 | ₹1.4 | 8.92 | 9.01 | 0.774 | | 8.91 | |
| * | April | | 2.18 | 78.4 | 6.3 | 0.828 | | 6.62 | |
|) | May | | 86.2 | 78.5 | 0.8 | 0.843 | | 83.1 | |
| • | June | 77.5 | 82.4 | 75.6 | 8.9 | 0.810 | | 86.2 | 86.2 78 |
| ۴ | July | 7.92 | 81.7 | 74.8 | 6-9 | 0.795 | | 0.18 | |
| 0 0 | August | 2.92 | 0.78 | 75.0 | 0.2 | 0.785 | | 85.9 | |
| Ø | September | 77.0 | 83.0 | 75.1 | 6.1 | 0.781 | | 84.7 | |
| 01 | October | 6-92 | 85.8 | 75.1 | 1.1 | 0.786 | | 85.5 | |
| = | November | 0.22 | 82.2 | 74.5 | 0.8 | 0.781 | | 84.7 | |
| 12 | December | 76.4 | 83.5 | 13.1 | 9.2 | 0.108 | | 78.5 | |
| 2 | Year | 77.8 | 84.0 | 15.4 | 9.8 | 0-770 | | 81.5 | 81.5 54 |

TABLE II.
SEASONAL DATA FOR TRIVANDRUM.

| Nos. | Season. | Mean Atmospheric Pressure (24 hours) reduced for Temperature. | Diurnal Range. | Mean Temperature in shade. (24 Hrs.) | Diurnal Range. | Mean Vapour Pressure. (24 Hrs.) | Mean Humidity. (24 Hrs.) | No. of days of thundery weether. | Rainfall. |
|------|------------------|--|----------------|---|----------------|------------------------------------|-----------------------------|-------------------------------------|-----------|
| 1 | Dry | 29.722" | 0.126 | 77:3 | 11.0 | 0.675 | 73.2 | 6 | 1.5″ |
| 2 | Summer | 29.661 | 0.117 | 80.3 | 9.3 | 0.812 | 79.5 | 45 | 14.7 |
| 3 | S. W. Monsoon | 29.661 | 0.097 | 77.0 | 7:1 | 0.793 | 86.0 | 14 | 30.7 |
| 4 | N. E. Monsoon | 29.707 | 0.118 | 77.8 | 8.4 | 0.758 | 82.9 | 27 | 20.4 |

TABLE III.

Topographic Distribution of Rainfall.

| Nos. | Coastal. | | Submontan | е. | Hill, | |
|------|------------------|-------|--------------|-------|----------|--------|
| 1 | Parūr | 80.4" | Malayāttūr | 95.2" | Münnär | 121.0" |
| 2 | ⊼ lleppey | 70.8" | Kānjirapally | 91.7" | Pīrmēde | 152:3" |
| 3 | Trivandrum | 30.7" | Nedumangād | 41.9" | Ponmudi | 95.0" |
| 4 | Colachel | 20.4" | Pēchippāra | 37:3" | Ashamboo | 65.0" |

ABLE IV.

SEASONAL DISTRIBUTION OF RAINFALL FOR EACH DIVISION.

| - 2 | Director | No. of | S. W. Mc | nsoon] | Rainfall. | S. W. Monsoon Rainfall. N. E. Monsoon Rainfall. | nsoon F | kainfall. | Total Annual Rainfall. | Annual F | kainfall. |
|---------------|------------|----------------------|-------------|---------|-----------|--|-------------------|-----------|------------------------|-------------|-----------|
| | | gauging stations. | Greatest. | Least. | Average. | Greatest, Least. Average Greatest, Least. Average. Greatest. Least. Average. | Least. | Average. | Greatest. | Least. | Average. |
| , | Trivandrum | 31 | ,2.6 ,6.14 | 12.6 | 24.0" | 24.0" 30.1" 14.8" | 14.8" | 21.4" | 91.0′ | 32.7" | 58.5 |
| જ | Quilcn | 21 | 79.3 | 8.9 | 53.9" | 31.5 | \$0. 1 | 23.3 | 143.0 | 143.0 40.2 | 100. |
| 62 | Kõttayam | 14 | 95.2 | 67.5 | 83.0 | 8.76 | 19.5 | 23.4 | 153.5 | 153.5 104.7 | 125.6 |
| 4 | Dēvikuļam | 6 | 152.3 7.7 | 2.2 | 0.92 | 36.1 | 14.2 | 23.9 | 205.4 | 6.22 | 116.5 |
| | | | | | | | - | : | | | |

ABLE V.

MONTHLY WIND VELOCITY AND FREQUENCY OF WIND DIRECTION AT S A. M.

Wind frequency at 8.4. M. to 16 points of compass.

| | 2 | 3 |
|---|-----|----|
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|------------|-----------|---|------------------------------|------|-----|----|-----|----|-----|------------|-----|-----|-----|--------------|-------------|----|-------|----------|------|----------|--|
| No. | Month. | | velocity in miles per hr. | Calm | NNE | NE | ENE | ы | ESE | SE | S E | so. | SSW | SW | WSW | * | H N H | 3/11 | HXV. | ×. | |
| - | January | : | 5.0 | 15 | 0 | 4 | 0 | C. | - | - | 0 | | 0 | ~ ? ≀ | 0 | | 0 | 0 | 0 | જ | |
| હક | February | : | 5.2 | 14 | 0 | က | 0 | 83 | 0 | _ | 0 | _ | 0 | | | | 0 | 0 | 0 | જ | |
| 623 | March | : | 6.1 | 16 | 0 | - | 0 | - | 0 | - | 0 | | 0 | - | 0 | 4 | 0 | - | 0 | ಬ | |
| 4 | April | : | 7.1 | ြ | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | ~ | 3 | 15 | |
| *C | May | : | 7.5 | +# | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | _ | 0 | 4 | 0 | 20 | က | 13 | |
| 9 | June | : | 8.1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | က | 0 | 9 | - | 14 | |
| <u>r</u> - | July | : | 9.6 | က | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | — | 10 | ~ | 13 | |
| 90 | August | : | 10.1 | က | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ~~ | | œ | 4 | 13 | |
| 6 | September | : | | જ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ? | | ∞ | 63 | 15 | |
| 10 | October | : | | 10 | 0 | 0 | 0 | _ | 0 | C.5 | 0 | - | 0 | 0 | 0 | ůΣ | ~ | 4 | - | ∞ | |
| 11 | November | : | 4.0 | 20 | 0 | ≈ | 0 | 83 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | . 0 | - | 0 | က | |
| 12 | December | : | 3.9 | 23 | 0 | က | 0 | €3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ?? | 0 | - | |
| | | | | | 1 | 1 | - | | | | | | 1 | | | 1 | | 1 | | | |

TABLE VI.
MONTHLY MEANS OF UPPER WIND DATA.

| | Heig | thts in | Heights in Kilometres above ground | res abc | ove grou | nd. | | | Heigh | ts in K | ilometr | es abo | Heights in Kilometres above sea-level | evel. | | | ١ |
|--------|---------|----------|------------------------------------|--------------|----------|------|------|------------|-------|---------|---------|--------|---------------------------------------|-------|-----|----------|-------------|
| Month. | Surface | ace | 0.5 | 67 | 0.2 | 100 | 0.2 | 10 | 1.0 | | 1.5 | 5 | 2.0 | 0 | 2.5 | ŭ | |
| | Du. | Vel. | Dn. | Vel. | Dn. | Vel. | Du. | Vel. | Du. | Vel. | Du. | Vel. | Du. | Vel. | Dn. | Vel. | ا بـ ا |
| Jan. | NNE | 6.1 | × | 2.4 | NE | 2.1 | · NE | 2.7 | ENE | 3.4 | ENE | 5.6 | A | 2.4 | | 王 | 8.4 |
| Feb. | NE | 1.6 | Var. | 61 | Var. | 5.5 | Z | 8. | NE | 5.6 | ENE | 3.8 | A | 4.6 | | EI FI | 4.0 |
| Mar. | NNE | 6.1 | × | 3.0 | Z | 3:5 | Z | 3.5 | NNE | 3.5 | NE | 3.8 | ENE | 8.4 | | E | 5.4 |
| Apr. | MNN | 2.2 | NNN | . | NNN | 6.7 | MNN | 8:4 | NNN | 4.9 | NNW | 4.9 | NE | 5.1 | ENE | | 6.3 |
| May | MN | 5.6 | NW | 6.7 | MN. | 2.9 | NW | †.9 | WNW | 7:3 | WNII | 7.3 | NNN | 7.1 | | · ;/ | 6.2 |
| June | MNN | 3.5 | XW. | ў. ф | WNW | 6.1 | WNW | 9 1 | WNW | 2.6 | WNW | 10.5 | WNW | 10.4 | MN | | 6.6 |
| July | NW | 3.8 | MN | 6.3 | WW | 6.6 | NW | 9.1 | MK | 12.3 | MN | 13.7 | WNW | 12.6 | WNW | | 13.7 |
| Aug. | NNN | 3. 4. | NW | 2.2 | NW | 8.3 | NW | 0.8 | NN | 10.0 | N.W. | 8.01 | NN | 10.2 | MN | | 10.5 |
| Sept. | MNN | | NW | 9.9 | MN | 7.3 | NW | 2.0 | MN | 2.8 | NW. | 6.5 | NW | 6.8 | Z | | 8.1 |
| .0et. | MN | 5.5 | NW | ç. † | NW | 5.3 | MN | 2.5 | NW | 0.9 | NW. | 6.5 | NN | 7.1 | 7. | | 4.2 |
| Nov. | Var. | 1.3 | NW | 7.7 | WN | 3.1 | WNW | 3.0 | Z, | 3.1 | NNE | 4.2 | Var. | 4.6 | S | NNE | 4. 6 |
| Dec. | NE | 0-1 | NE | 9.7 | NE | 2.2 | NNE | 5. 8. | ENE | မှ | ENE | 4.0 | ENE | 4.6 | | B | 9.0 |
| | - | - | _ | - | | | - | 1 | | - | | | | | | | |

TABLE VI-(continued).

MONTHLY MEANS OF UPPER WIND DATA.

| | | | | | H | eights | Heights in Kilometres above sea-level | etres | ароте в | ea-leve | -: | | | | | |
|--------|-----|------|------|----------|------------------|---------|---------------------------------------|------------|---------|------------|----------|------|------|------------|------|------|
| Month. | 3.0 | | 35 | | 4.0 | | 4.5 | | 5.0 | | 0.9 | | 2.0 | | 0.8 | |
| | Dn. | Vel. | Di. | Vel. | D _i . | Vel. | Dn. | Vel. | Dn. | Vel. | Dn. | Vel. | Dn. | Vel. | Du. | Vel. |
| Jan. | 田 | 6.1 | Ħ | 6.5 | 田 | 8.9 | E | 6.7 | 田 | 9.4 | P | 8.5 | ESE | 7.7 | Var. | 9.2 |
| Feb. | Ħ | 5.4 | Ħ | 6.1 | H | 8.9 | Ħ | 7. | ESE | 6.1 | ESE | 7.3 | ESE | 8.4 | SE | 8.4 |
| Mar. | Ħ | 5.8 | 闰 | ₹.9 | 田 | 9.9 | ध | 1.2 | 闰 | 7.5 | Ħ | 2.9 | घ | 1.0 | Var. | 5.5 |
| Apr. | ENE | 0.1 | ENE | ان تن | ENE | | ENE | 8.3 | ENE | 1.1 | ENE | 7.8 | 凶 | 6.4 | 凶 | 13.9 |
| May | Z | 6.8 | Z | 8.4 | NNW | 2.08 | NNE | 2.6 | NE | 6.4 | NE | 6.6 | Var. | 8.3 | Var. | 8.9 |
| June | MN | 9.6 | NNW | 8.1 | Z | œ !- | NW | 1.2 | Var. | 6.5 | NNE | 7.1 | Var. | 4.7 | × | 9.0 |
| July | WNW | 7.11 | WNW | 14.5 | WNW | 11.8 | WNW | 12.4 | Var. | 6.3 | Var. | 8.8 | Var. | 0.9 | SE | 0.9 |
| Aug. | NW | 10.0 | WNW | 0.6 | Var. | 6.2 | Var. | 8.5 | Var. | 2.6 | a | 8.1 | 田 | 9.9 | 뙤 | 5.5 |
| Sept. | NNN | 8.8 | NNW | 6.8 | NNW | 1.1 | NNW. | 0.0 | Var. | 9.4 | NNE | 2.2 | Var. | 7.1 | Var. | 7.6 |
| Oct. | NNN | 7.1 | Var. | 7.1 | Var. | 6.9 | WNW | 7.9 | Var. | 7.9 | Var. | 6.1 | Var. | 3.8 | ESE | 4.4 |
| Nov. | NNE | 2.0 | NNE | 2.8 | × | 9.9 | ENE | 2.9 | NE | 9.9 | ध | 6.5 | 臼 | 9.4 | 囶 | 6.9 |
| Dec. | 囶 | 5.3 | Ħ | 5.9 | Þ | 2.9 | 田 | 4.7 | 闰 | 7.4 | E | 6. L | 闰 | 9.8 | 田 | 13.1 |

Direction of wind is given to the 16 points of the compass.

Velocity is given in metres per second (1 metre per second = 2.24 miles per hour). Var. means variable direction.

TABLE VII.

SUMMARY OF METEOROLOGICAL EVENTS RECORDED AT THE TRIVANDRUM OBSERVATORY.

| | Rainfa | u. |
|--------------------------------|-------------------|--|
| Greatest annual rain fall | { | Year 1933 Amount 119 [.] 5" |
| Least annual rainfall | { | Year 1860 Amount 35·1 |
| Greatest rate of precipitation | $\left\{ \right.$ | 2·4" in 45' (2 P. M. to 2.45 P. M.) on 24-10-'36, i.e., 3·2" per hour. 1·36" in 17' (3.35 P.M. to 3.52 P.M.) on 26-3-'24, i.e., 4·8" per hour. |
| Greatest amount of preci- | 5 | Dato 15-5-1926. |

Amount 10.94"

Temperature.

 $\begin{array}{ccc} \text{Highest maximum} & & \text{Date} & 26.3.1896 \\ & \text{Magnitude} & 96.0^{\circ}\text{F.} \end{array}$

Hail Storm.

Date 9.5-1924.

pitation in 24 hours.

Size of hail stone—1' to 114" (oval shape).

Wind velocity at peak of storm—55 to 60 miles per hour for about 30 minutes.

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CHAPTER III.

GEOLOGY.

The geology of Travancore does not show any fundamental difference from that of the other parts of South India. The rocks consist mainly of the Archoean series though in the coastal tracts the recent sedimentary formations known as the Varkala series stretch almost continuously throughout the whole length of the State from north to south. These are succeeded by more or less flat beds, the Vindhyan formations, above which are the Gondwanas. The great accumulations of eruptive flows and ashes known as the Deccan Trap come next in the geological time-scale.

South India is regarded as the fragment of a great continent, the Gondwana Land, which corresponds to a large extent with the Lemuria of zoologists. That ancient continent is believed to have extended to Africa and possibly South America on the one side, and to Australia on the other. The land connection continued in the mesozoic epoch. It is probably at the close of the cretaceous or the commencement of the eocene period that the great Indo-American continent was finally submerged.

Subsequently the distribution of land appears to have undergone great changes, a mighty on rush of waters taking place in certain places followed by a subsidence at others. This explains the presence of the marine cretaceous beds on the eastern coast of South India from Trichinopoly to Pondichery, beds which rest against the gneiss. On them lie patches of Cuddalore sandstone regarded as Upper Tertiary. Of about the same age are the Varkala beds on the Travancore coast. The conclusion of the science of Geology is that Peninsular India has remained the same and has had a continuous existence from the earliest times except in the coastal tracts. The stability of the land is

evidenced by its comparative immunity from earthquake shocks which are of very common occurrence in the Himalayan and sub-Himalayan regions. In distant geological times the Tethys covered the whole of the northwest Punjab and the regions of the outer and central Himalayas as far east as the Ganges. Successive earth movements appear to have taken place on a gigantic scale resulting in the elevation of the Himalayas. This is the chief distinguishing feature between the geology of South India and that of North India.

There are also certain essential points of difference between the west coast and the east in regard to geological conditions. The Western Ghats, running in a continuous line from Bombay to Cape Comorin, divide the western tracts from the edge of the table-land. The present configuration of these western tracts is presumed to have been brought about either by a tilting movement of the table-land itself or by a subsidence of the land which formerly extended into the expanse of the waters. Excepting the Varkala beds which rest against the escarpment of the Western Ghats in the extreme south, the whole coast is devoid of any marine deposit. In the east coast, on the other hand, we meet with sedimentary deposits which begin with the lower Gondwana and then extend into the Upper Tertiary. Distinguished from the Eastern Ghats in diverse respects, the Western Ghats itself presents different features. It runs almost continuously near the North of latitude 16° it is formed by the vast accumulations of volcanic outflows of lavas and ashes of the Deccan Trap. But south of this latitude the range is composed of gneiss.

It is in the light of the foregoing observations that the geological formations of Travancore may be examined. The Western Chats forms the eastern boundary of the State which runs in a north-north-east and south-south-west direction. The country descends by steps, as it were, from the mountains to the coast. This terrace arrangement is much less well-marked in South Travancore than in the north. The several terrace steps are marked by the existence of some ridges near the coast higher than the general surface of the adjoining country. Here the core of this mountain chain, including its high peaks such as Anamudi, Kattumala and Mahēndragiri, is formed of the Charnockite series. The rocks of the series bear distinct marks of having been once confined to considerable depths. But how they thence came to occupy their present elevated position still remains to be definitely ascertained. Whatever may be its exact mode of formation, there is no doubt about its having resisted the forces of denudation for a very long period of time.

Contribution to the variation in topography is also furnished by the low-lying, dome-shaped, lateritoid hills of the country from Trivandrum northwards. South of Trivandrum also there are certain rocks of varying sizes scattered about more or less near the coast. They give to the land surface an undulating aspect. These hills are usually bare of soil and vegetation. There is a concentration of ferruginous element in their lithological constituents. Records indicating the advances and recessions of the sea are preserved for us in the logs of wood found below the ground in the Kari land area of Central Travancore. Mr. Crawford who was for some time in the Travancore Government service has testified to the fact that in cutting the Varkala tunnel trees were found under the surface and also shells known to belong to a class of shell-fish that only thrive in deep sea water. The marine beds at Vattakotta. Cape Comorin and Kanakappur in South Travancore also afford evidence of sub-recent elevation of the beach.

Conspicuous among the physical features of Travancore are the backwaters. "Immediately after the upheaval of the Varkala formations, the backwater tract north of Quilon must have been an extensive bay breaking its waves on the dry land. Into this bay were being discharged the waters of the Periyār and other rivers which drained Central and North Travancore. One of the effects of the discharge of these waters laden with sediments was the formation in course of time of a sand-bank which is represented by the present sea-coast north of Quilon. The lagoon formed between this sand-bank and the mainland gradually silted up and gave rise to the wet paddy lands and the cocoanut gardens which now characterise the backwater tract. The comparatively deep Kāyals or lakes which are now seen in the backwater tract are the portions of the great lagoon that has not yet been silted up". The origin of the sandy tract north of Quilon intercepting the sea and backwater and extending up to Parūr in the north is also explained in the above citation.

The mud-bank off the coast of Alleppey is an interesting natural phenomenon that has attracted the attention

Smooth-water anchorage of mudof several observers from time to time. During the monsoons layers of fine soft mud collect in the sea near the coast at some places between Alleppey and Porakkād. They extend for some miles into the

sea. Even when the weather is rough and the sea runs high, the water over the layers of mud is rendered so smooth that vessels can anchor safely. This mud-bank changes its position. Captain Drury says:—"The origin of this deposition of so large a quantity of mud in the open sea about two or three miles from the shore and so many miles from any bar or outlet from the backwater has never been satisfactorily accounted for. From the circumstance of there being no natural outlet for the vast accumulation of waters which are poured down from the various mountain streams into the basin of the backwater nearer than thirty-six miles on either side, it is not improbable that there exists a subterraneous channel communication with the sea

from the backwater through which the large quantity of mud is carried off and thrown up again by the sea in the form of a bank". Messrs. Crawford and Rhode, who were Commercial Agents at Alleppey, carried out certain investigations into this phenomenon at the instance of General Cullen, the British Resident in Travancore and Cochin from 1840 to 1860 A.D. The former was of opinion that the perfect smoothness of the water in the roads and at the Alleppey beach was attributable not so much to the softness of the mud at the bottom as to "the existence of a subterranean passage or stream or a succession of them which, communicating with some of the rivers inland and the backwater, became more active after heavy rains, particularly at the commencement of the monsoon, than in the dry season, in carrying off the accumulating water and with it vast quantities of soft mud". He found that at the period of deficient rain the mud-banks were less effective as anchorages. He also observed that after or during heavy rains the beach suddenly subsided, slightly at first but gradually as much as five feet, when a cone of mud suddenly appeared above the water, bursting and throwing up immense quantities of soft, soapy mud of considerable consistence in the form of boulders with fresh water, debris of vegetable matter decayed and in some cases fresh and green.

The latter states that he has seen mud volcanoes bursting up in the sea during the rainy season, which appeared "as if a barrel of oil had suddenly been started below the surface." He thinks that the mud thus formed is gradually floated away to the southward by the littoral current and fresh banks are formed, whenever the hydraulic pressure of the inland backwater increases sufficiently to overcome the subterranean resistance of the stratum of fluid mud which is formed at certain places; and as a further proof, he adduces the fact that the extent of the mud-bank at Alleppey increases and diminishes as the level of the inland water rises and falls, as was most observable in 1882,

- Dr. King of the Geological Survey of India, who visited Travancore, appears to have been swayed by the observations of Mr. Crawford. His conclusions are:—
- 1. There may be an underground river from Chengannür.
- 2. The discharge of the mud is due to hydraulic pressure from the backwater by percolation or through underground channels.
- 3. The smoothening influence of the water over the mud-banks is due to the oil contained in it.

There are three well-known hollows in the bed of the river Pampa near Chengannūr. But their bottoms have been discovered to be solid rock. It is not, therefore, likely that they are connected with the sea.

With regard to the second point, Mr. Philip Lake, also of the Geological Survey of India, holds a different view. He says, "The chief point then in which I differ from previous observers is in considering that the Alleppey bank is formed not from the backwater mud but from an older river deposit found only at particular points along the coast." Mr. Chacko who was State Geologist in Travancore postulated that it is due to the mutual interference of currents.

The action of oil in calming disturbed waters and in smoothening out the waves is well-known. Oil has also high spreading power. An experiment performed sometime ago in the harbour of Peterhead, when a stream of oil was cast upon the heavy seas at the mouth of the harbour with such success that vessels were enabled to run in with comparative ease, clearly proves this. The more potent factors influencing the smoothening of the waves that encounter the mudbank will be found in the physical properties of the water above it, density, viscosity, and surface tension. Here is an explanation given by an eminent geologist based on density. "The large quantity of impalpable mud mixed with the water increased its density and consequently the waves, on

entering this dense water, decrease in size and are retarded. Moreover, as the proportion of mud is much less at the surface than lower down, the lower part of the wave is retarded more than the upper and the wave may actually break if the increase in density be sufficiently rapid, or merely be obliterated, if it is sufficiently gradual. This action is intensified by the large amount of fresh water falling on the sea as rain and poured out by the rivers...".

Recent borings made by the Water Works and Drainage Department of the State in the locality lend considerable support to the presumption of the existence of an underground stream. A copious supply of good potable water is drawn from a bed of sand superimposed by soil and clays to a depth of about 200 ft. from the surface, the sand bearing a close similarity to ordinary river sand. This corroborates the view that there is a discharge of water into the sea from a river or system of rivers underground.

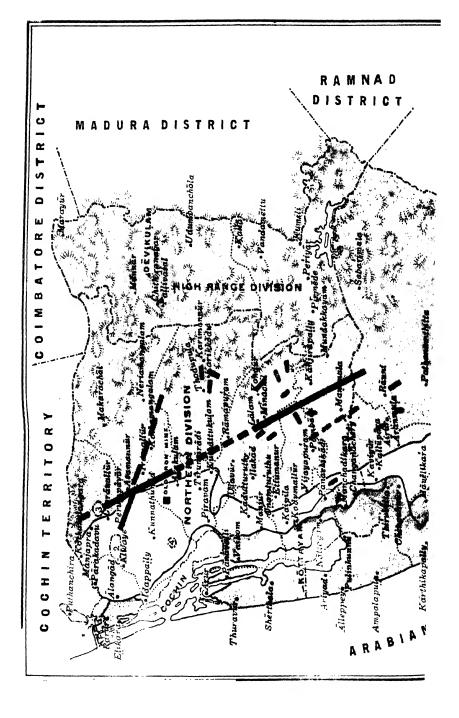
From a study of the seismological observations recorded by De Montessus de Ballore, a general instability of the charnockite terrane in which Travan-Earthquakes. core is also included has been postulated. The shocks, when they occur, are generally of low intensity "When compared with such unstable seismic regions as Assam and the Eastern Himalayas the whole of the Peninsula is, of course, seismically very stable." Ninety one earthquake shocks have been recorded by the Geological Survey of India for 1936; of these only five had their origin in Peninsular India and they were all minor shocks. Four of these five were recorded in Rajaputana and South India had only one shock.

The geological formation of Travancore, arranged

Recent:-sands, alluvium, marine beds.

Tertiary:--Varkala beds.

Archoen:-Crystalline rocks.



Litho, The Art Printing Works, Trivandrum

The crystalline rocks of Travancore are composed of numerous units. They have undergone a high grade of metamorphism. Their history is long and Crystalline rocks. complicated. In any attempt to establish their mutual relationship it is worth while to consider not only their genesis but also the changes of metamorphic conditions which have been responsible in bringing about different rock types. A comprehensive study has led Sir Lewis Fermor to the conclusion that Travancore-Ceylon Province, characterised by an extraordinary abundance of garnets, is one of the two most highly metamorphosed provinces of India.

Various kinds of gneisses are found in Travancore, of which the Charnockites and the Leptynites are the most common. The latter variety is more noticeable in the southern part of the State. "In South Travancore the general dip of the rocks is north-east with the exception of a few places along the coast, such as Thengapattanam, where the dip is south-west. In Central Travancore the dip usually noticed is south-west. Up to a few miles north of Ettumanur on the western side of the gabbro dyke, marked on the map, the dip is south-west. But at Vulavur, Kuthattukulam and Piravam, which are on the western side of the dyke, the dips noticed are east-north-east. Near Alwaye south-westerly dips may be noticed. On the eastern side of the dyke the dips are north-east or east-north-east. It would appear that the gabbro dyke represented the axis of an anticline. The dips round about Küthättukulam are apparently against this conclusion. Round about the Pefuvanthanam ravine which is situated immediately west of Pîrmēde, the dips are directed away from the ravine, as if the ravine represented the site of a subsidiary anticline. At Kothamangalam the dip is east-south-east. But in the bed of the Perivar a few miles north-east of Kothamangalam dips directed south-south-east may be noticed. The general strike of the crystalline rocks in Travancore may be taken as approximately north-west and south-east. The general direction of the hill chains coincides with this direction."

Leptynite is usually white in colour. It consists essentially of quartz, felspars and garnet with magnetite and ilmenite as accessories. Mica is also Leptynites. sometimes found; as stated above, it is developed in many places in South Travancore. A sample of Leptynite, though not representative, gave the following results on analysis:

| Silica | (Si 02) | ••• | 68.78 |
|------------|-----------------------------|-------|--------|
| Alumina | (Al_20_3) | ••• | 11.37 |
| Iron Oxid | le | ••• | 9.41 |
| Lime | (Ca 0) | ••• | 1.21 |
| Alkalies | $(K_20 \text{ and } Na_20)$ | ••• | 9.13 |
| Ignition l | loss | • • • | 0.54 |
| | | | 100:44 |

The charnockite series, as referred to before, constitute the mountain range of the State, viz., the Western

Ghats and its prominent peaks and plaCharnockites, etc. teaux. Hence it was considered by the older geologists as a type of gneiss called the mountain gneiss or Nilgiri gneiss. That it is igneous in origin is generally agreed.

"All members of the charnockite series with the exception of Pyroxenite may be met with in Travancore. The basic members such as augite, norite, and horn-blende occur as dykes both in the charnockite and leptynite areas. The variety most commonly developed seems to be intermediate charnockite." The results of the analysis of intermedial charnockite are:

| Silica (Si | 0_2) | ••• | 63.27 |
|----------------|--------------------------|-------|-------|
| | $(2\tilde{0}_3)$ | ••• | 18.29 |
| Iron Oxide (Fo | erric and Ferrous) | | 6.80 |
| Lime (Ca | | • • • | 3.06 |
| Magnesia | , | | 0.46 |
| Alkalies (K2 | 0 and Na ₂ 0) | | 7.08 |
| Ignition Loss | • / | | 0.92 |
| (Z | | | 99.88 |

The minerals most common in the charnockites are felspars with the characteristic mineral hypersthene of which the quantity will be varying according to the variety of the specimen. The acid varieties, of course, show free quartz; augite and horn-blende are met with in the intermediate and basic varieties. Mica, apatite and zircon occur as accessory minerals.

"Round about Ettumanur, Charnockites rich in horn-blende rocks occupy the acid and intermediate divisions in composition. An orthornombic pyroxene being a characteristic mineral in these rocks, they may be referred to as charnockites. Microperthibic felspar is the most common mineral in all the members of this group. In the more basic members some plagicolax is found, while in the more acid varieties free quartz is developed. The mount of horn-blende increases with the basicity of the rocks. Some biotite is present in the more acid members of the group. Some black iron ores are also noticeable in this group.

"Farther north, the rocks developed in the Periyār basin are a kind of horn-blende granite or syenite. In these rocks the gneissose structure is very well developed. They are light in colour. The most common ferromagnerium minerals in these rocks are horn-blende and biotite. The colourless minerals consist of felspars and sometimes quartz. Both striated and unstriated felspars are noticeable, the latter being predominant. Some of the felspars are turbid having undergone partial decomposition. Occasionally felspars showing uniaxial interference figures may be noticed. Scapolite is sometimes found as an accessory. The structure of the rock is allotriomorphic granular. In some places the rock has a fine texture, while in other places it is extremely coarse.

"Under the extensively developed residual laterite at and in the neighbourhood of Puthencruz, an acid rock which does not appear to belong to the charnockite series may be met with. This rock consists almost entirely of felspar and quartz. A few of the felspar crystals show lamellar twining. There are a few crystals of a green pyroxene which does not show any pleochroism. There is also a little iron ore. The specific gravity of the rock is about 2.67. This rock may be called an augite-granite.

"An interesting kind of rock containing cordierite is found in Köttayam and a few other places south of Köttayam. Cordierite is usually an optically negative mineral. But in this rock some, if not all, cordierite crystals are optically positive." A sample of cordierite carefully separated from this rock gave the following results on analysis:

| Water $(H_2 0)$ | ••• | 1.74 |
|--|-----|--------|
| Silica (Si 0 ₂) | ••• | 49.74 |
| Ferric Oxide (Fe ₂ 0 ₃) | ••• | 5.65 |
| Ferrous Oxide (Fe O) | ••• | 3.00 |
| Alumina (Al ₂ O ₃) | ••• | 35.21 |
| Lime (Ca O) | ••• | 1.05 |
| Mangesia (Mg O) | ••• | 4.30 |
| Total | ••• | 100.69 |

This composition of the cordierite, like its optical character, is somewhat peculiar in that the percentage of ferrous oxide and magnesia is very low. It contains numerous inclusions of monazite showing pleochroic halos.

"Another interesting kind of rock occurs about two miles east of the Changanassery landing. The essential constituents of the rock are quartz and felspars. A greenish yellow biotite and some iron ores and probably a little horn-blende occur as accessory minerals. A micrographic intergrowth of the felspars or of quartz and felspars is the most characteristic feature of this rock. Quartz appears to have been the first mineral to crystallise out. More or less straight cracks resembling cleavage lines are seen in most

of the quartz crystals. Microscopic veins of felspar are also seen in some and these veins are contiguous with the surrounding felspars.

"Among the gneisse pegmatites are very common. These consist usually of large crystals of quartz and felspar with mica, magnetite and other minerals. Besides these pegmatites what may be called quartz reefs are very common in the gneisses. In some parts of Travancore these quartz reefs are very abundant and persistent, e. g., the Mundakayam District. Here as well as in Peermede some extensive quartz reefs may be noticed. But in other places the reefs are usually of small dimensions. Under the microscope the reef rock is found to consist mostly of crystals of quartz showing an allotriomorphic structure which becomes evident between crossed nicols. Minute crystals of felspars may be seen in this groundmass of quartz. Besides these, minute crystals of ferromagnesium minerals and pyrite may also be occasionally noticed."

Dykes usually found among the crystalline rocks are gabbro, dolerite, norite and dunite. Both the first and the second consist essentially of augite and felspar, which latter approximates labra-Dykes. dorite in composition. In the dolerite the augite is optically related to the felspars which occur in well defined crystals. In the gabbro the augite appears in well defined crystals. In both these rocks olivine is occasionally met with. The norite is similar to these in chemical composition, but it is distinctly different from these in structure and mineral composition. In structure the rock is granular and the crystals of the different minerals are nearly of the same size. The augite in the gabbro and dolerite is brown in colour, whereas that in the norite is usually of a bright green colour. The augite in the latter is sometimes found converted into horn-blende. chief distinguishing feature of the norite is the presence in

it of hypersthene. The chemical composition of these three rocks is given in the following table.

| | | Gabbro. | Dolerite. | Norite. |
|--|--------------|---------|--------------|---------|
| Ignition loss | | 1.24 | 1.65 | 0.50 |
| Silica (Si O ₂) | ••• | 50.45 | 49.81 | 51.41 |
| Alumina (Al ₂ O ₃) | | 20.06 | 18.10 | 15.15 |
| Ferrous Oxide (Fe O) | ••• | 8.71 | 8.05 | 4.86 |
| Ferric Oxide (Fe ₂ O ₃) | | 4.76 | 5.50 | 10.81 |
| Lime (CaO) | ••• | 10.45 | 12.47 | 10.75 |
| Magnesia (MgO) | ••• | 1.50 | 2.65 | 2.00 |
| Potash (K ₂ O) | ••• | 0.85 | 0.31 \(\) | 3.30 |
| Soda (Na ₂ O) | ••• | 1.75 | 2.40 € | 0 00 |
| Phosphoric anhydride (P. | $_2$ O_5) | 0.50 | 0.21 | |
| Total | •• | 99.64 | 100.85 | 98.48 |

The fourth kind of dyke rock consists almost entirely of olivine which is serpentized, along cracks. Besides magnetite, a bright blue or violet isotropic mineral is found sparsely scattered in minute crystals throughout the mass of the rock. In some specimens a few lathshaped crystals of felspar may be noticed.

The gabbro dyke is a conspicuous feature of rouch Travancore. It has been traced in an almost upbroken straight line passing through Mūvāttupuļa and Lālam to within a few miles of Rānni. Subsequently an exposure of the same was noticed in the neighbourhood of Punalūr. This is apparently a part of it. The gabbro is usually exposed as a chain of hill, which is conspicuous by the well-rounded boulders into which the gabbro has a tendency to weather. The dolerite dykes are seen on either side of the gabbro dyke. They are varying in length and thickness. The one passing through Kōthamangalam in W. N. W. direction is the longest that has been traced. This extends from Pymattam near Nēriamangalam as far as west as Perumpāvūr, i.e., for a distance of about sixteen miles. Norite dykes, like the dolerite dyke, are common to all

parts of Travancore. But dunite has been so far found only in one place. It is near Punalur.

Laterite is a term coined by Dr. Francis Buchanan more than a century ago to describe the rock he came across for the first time at Angadipuram and its neighbourhood in Malabar. A great deal Laterite. of controversy over its exact significance has been going on for some time past. It may be said to have ended with the recent contribution to the subject by Dr. Cyril Fox. But the range of his investigation did not include the laterites of Travancore. Laterite is a soft material hardening on exposure. Vermicular texture is its chief physical property. It consists of hydrated oxides of Aluminium and iron in which combined silica is characteristically absent. The laterites of Travancore, like the Malabar laterite, while possessing the essential physical proportios, are deficient in Aluminium hydroxide. Hence they come under the class of "Lithomorgic laterites", laterites not fully formed or finished. Two varieties of laterite are mot with, viz., 1. the residual, formed by the in situ alteration or disintegration of the gneiss in which every gradation to the original rock is noticeable. It occupies a region between the crystalline rocks in the east and the Varkala formation in the west and extends throughout the whole length of Travancore from Cape Comorin to the northern frontier. 2. Sedimentary and transported. It is found capping the Varkala formation and is hence generally found developed in the coastal and other low-lying regions. In this instance it has been formed by the lateritisation of a sedimentary rock. Laterite is so soft that it can be cut into any shape by an ordinary iron instrument and this shape is retained by it. Hence it finds extensive use in Travancore as a building material. The following table gives the chemical composition of laterite found in some of the localities in the State.

| | Puthen- cruz | Mūvāt- tupuļa | Kōḷa | Rānni | Trivand- rum |
|------------------|-----------------|------------------|-------|--------|-----------------|
| Ferric Oxide | 55.86 | 7.15 | 3.62 | 0.70 | 7.85 |
| Alumina | 13.61 | 31.30 | 26.35 | 10.86 | 27.35 |
| Titanium Oxide | Trace | 6.19 | 1.00 | ••• | 2.08 |
| ManganeseOxide | | ••• | ••• | ••• | ••• |
| Lime | | | 1.21 | ••• | ••• |
| Alkali | | | Trace | ••• | ••• |
| Silica | 15.53 | 43.10 | 52.20 | 81.67 | 50 03 |
| Phosphoric Oxide | | Tracs | Trace | ••• | ••• |
| Moisture at 110° | 2.40 | 2.11 | 5.96 | 2.80 | 2.30 |
| Loss on ignition | 13.05 | 10.38 | 9.58 | 4.02 | 10.00 |
| | 100.45 | 100.23 | 99.92 | 100.05 | 99.61 |

The Varkala formation takes its name from Varkala

Varkala formation.

on the coast, twenty six miles north of

Trivandrum. Dr. King gives in section

the following:—

| Laterite | *** | 30-40 ft. |
|--------------------------------|--------|-------------|
| Sands and sandy clays or Lithe | omarge | 58 ,, |
| Alum clays | *** | 25 ,, |
| Lignite beds | | 7-15 " |
| Sands | ••• | ••• |
| То | tal | 120-130 ft. |

The lignite bed that is seen at the base of the Varkala cliffs consists almost entirely of lignite in some places, while in other places it is represented by a kind of carbonaceous clay or mixture of clay and lignite. Pieces of resin and concretions of marcasite are sometimes met with in the bed.



The Varkala Cliffs.

Lignite marks an intermediate stage in the formation of peat into coal. It represents a stage in the conversion of the original vegetable matter into pure carbon. sufficiently pure form it provides a good fuel. Its fuel value is increased by up-grading, i. e., by carbonising it to drive away all moisture and volatile matter. It is then briquetted and marketed for industrial purposes. In Germany it is used for steam-raising in place of coal. In Australia, the lignite deposits at Morwell are being used in the generation of electric power. Valuable by-products, such as tar, light oils, gases and ammoniacal liquor, are obtained by subjecting lignite to low temperature distillation. The importance of lignite in South India has been stressed by Dr. Cyril Fox sometime back. In his opinion, "the time is ripe for a re-investigation of some of the more favourably located occurrences of Indian lignite." Travancore, the chief places where lignite is exposed to view are in the Varkala cliffs for a distance of about three and a half miles and in some places on the banks of the Ashtaniudi lake. The quantity available has been estimated to be about one hundred million tons. Some samples of lignite were obtained from the beach sections at Varkala and analysed. They showed it to possess properties including a high percentage of ash, detracting from its economic value. But the following analysis of a sample taken from Kānjirode (Quilon Taluk) gives a comparatively low percentage of ash.

| Moisture | 12.70 |
|--------------|--------|
| Volatiles | 42.75 |
| Fixed Carbon | 30.45 |
| Ash | 26.80 |
| | 100.00 |

Two samples of the lignite ash analysed at the Imperial Institute, London, gave the following results:

| | | Sample A. | Sample B. |
|---|-------------------|----------------|---------------|
| Titanium di-oxide (TiO2) | ••• | 1.14 | 1.27 |
| Ferric Oxide (Fe ₂ O ₃) | ••• | 10.45 | 3.42 |
| Alumina (Al_2O_3) | | 5.25 | $12 \cdot 12$ |
| Manganous Oxide (MnO) | ••• | 0.09 | 0.10 |
| Lime (CaO) | ••• | 0.37 | 4.24 |
| Magnesia (MgO) | ••• | 0.27 | 1.01 |
| Potash (K ₂ O) | ••• | 0.52 | 0.93 |
| Soda (Na ₂ O) | | 0.97 | 2.51 |
| Silica (SiO ₂) | ••• | 65.21 | 61.31 |
| Carbon di-oxide (CO ₂) | ••• | Nil | 1.72 |
| Sulphur trioxide (SO ₃) | ••• | 6.07 | 5.08 |
| Phosphorus pentoxide (P ₂ O ₅) | ••• | Trace | 0 06 |
| Chlorine (Cl) | | \mathbf{Nil} | 0.13 |
| Moisture and Combined Water (| H ₂ O) | 10.25 | 3.98 |
| Organic matter | ••• | Nil | 2.05 |
| Total | ••• | 100:32 | 89.93 |

It is quite likely that systematic prospecting will lead to the discovery of lignite of better qualities.

The extent of the Varkala formation was once taken to be about five hundred square miles. Subsequent observations, however, have shown this to be a considerable underestimate. Occurrences have since been discovered in the tracts east of the backwater in north Travancore. It is also believed to underline the silt in Kuttanad and other backwater tracts in Central and North Travancore. It is reported that the formation exists in South Travancore too.

The age of the Varkala formation may be said to have been determined. Gen. Cullen was the first to draw attention to the existence of a limestone bed round Quilon, familiar to Indian geologists as Quilon Limestone. Although vigorous search was made subsequently to obtain evidence of its existence in situ in the Varkala beds, a few isolated blocks at Padappakara, about five miles north-east

of Quilon, were all that could be identified. But it was rediscovered about a decade back at Paravūr (Quilon taluk). The bed occurs at a depth of about forty feet below the surface. Both above and below this bed lignite is met with. This may lead to the inference that it forms part of the Varkala series. The marine fossils recognised in it are strombus fortisi, cassis sculpta, voluta jugosa, rannela bufo, conus catanulatus, conus marginatus, certithium rude cyprecca and an abundant species of the foraminifer orbitolites. The evidence thus obtained is in favour of regarding the formation as upper tertiary in age.

The China clay deposits of this formation have been recognised as an important source of mineral wealth. The recent formation in South Travancore consists of marine beds, blown sands, coral reefs and soils. These are best described in the words of Bruce Foot of the Indian Geological Survey.

"At Cape Comorin and two other places along the coast to the northward are formations of Marine beds. small extent but very considerable interest. which, by their mineral constitution and by the abundance of fossil marine shells they enclose, show themselves to be of marine origin, and thus prove that the coast line of the Peninsula has undergone some little upheaval since they were deposited. These beds are to be seen close to the Cape at the base of a small cliff which occurs immediately south of the Residency bangalow and only about two hundred yards west of the Cape itself. The rocks seen in the surf and immediately behind it on the beach are all gneiss. The base of the small cliff is composed of friable gritty calcareous sand-stone, full of comminuted shells. The base was not exposed at the time I examined the section, some heavy gale having piled up the beach and against the foot of the cliff, and for this reason it was impossible to trace the probable connection of the sandstone with another exposed at a slightly

lower level at a few yards distance to the west. This lower bed is similar in mineral character, but very hard and tough, and offers great resistance to the surf but has nevertheless been deeply honey-combed and in places quite undermined. The roofs of the miniature caves thus formed have in some cases fallen in, but have been partly recemented by deposition of the calcareous matter in the lines of fracture. To return to the cliff section, the basement sandstone is overlaid by a similar but slightly harder yellowish friable bed, which contains many unbroken shells (all of living species), in addition to a great quantity of comminuted ones. base of the lower bed is hidden by sands, but from the proximity of the gneiss it cannot exceed 5 or 6 feet in thickness. while the overlying shelly bed measures about the same. It is overlaid in its turn by a massive bed, 6 to 10 feet thick locally, of a kind of travertine formed of altered blown sand, composed mainly of fully comminuted shells. This travertine contains immense numbers of shells and casts of Helix vittata, the commonest land shell in the south. Owing to the soft character of the marine sandstones, the cliff has been much undermined by the tremendous surf which breaks on this coast in bad weather, and great masses of the hard travertine of the Helix bed have fallen on to the beach, forming a partial breakwater against the inroads of the sea.

"The shells contained in the upper sandstone bed were all found to be of living species, where sufficiently well preserved for specific identification; the majority of the specimens are too ill preserved for specific identification. Four miles north-north-east from the Cape stands the little stone-built fort of Vattakotai, which is built upon a small patch of calcareous sandstone, full of marine shells, exposed in the most along the north face of the long curtain wall which joins Vattakotai fort with the extensive series of fortifications known as 'Travancore lines'. The marine limestone may be traced for nearly half a mile inland in

the bottom of the moat. This marine bed is overlaid by a very thin bed of travertine limestone full of Helix vittata: it has been cut through in the formation of the moat. The thickness of the shelly marine bed is unknown, but the Helix bed is not seen to exceed 10" or 1' in thickness. As far as seen in the very small exposure, both formations lie nearly horizontally. Another, small exposure of the marine bed occurs at the western end of a little backwater to the north of the fort. The sandstone here contains many well-preserved marine shells, all of living species; but further west, where the bed is exposed below the Helix bed in the moat; the enclosed shells are all broken and comminuted. The surface of sandstone, as seen at the end of the little backwater, is raised but a very little distance above the sea level, probably not more than 4 or 5 feet at the outside. The rise of the ground along the moat is extremely small, and even at the furthest point from the sea at which the sandstones are exposed the elevation is probably not more than 10 or 12 feet at most, which would correspond with the top of the sandstones as seen in the little cliff at Cape Comorin.

"About two miles north-east-by-north of Vattakotai fort a small patch of white shelly limestone occurs peeping out of the low belt of blown sand which fringes the coast at that spot. The village of Kanakapūr which lies immediately to the north is the last within the Travancore boundary. The limestone only stands out a few inches above the surface of the surrounding sands, and no section could be found to show its thickness, but in point of elevation above the sea level it agrees perfectly with the and Cape Comorin beds. The limestone Vattakotai which is fairly hard is quarried for economic purposes, and unless a good deal more of the bed than now meets the eye remains hidden under the sands, it will, before many years are over, have been removed by human agency.

"The shell remains occur as impressions and casts of great beauty and perfectness, but the shelly matter has dissappeared entirely, being probably slightly more soluble than the enclosing limestone. The limestone contains a large number of specimens of *Helix vittata* which were evidently carried out to sea and there entombed in a shallow water formation. To any one who has noticed the enormous numbers of this Helix living in this neighbourhood, and in the southern districts generally, the large numbers of it occurring fossil in this marine bed will be a matter of no surprise.

"Two very marked varieties of Aeolian rocks occur along or near the coast of South Travancore as well as along that of Tinnevelly. They are the red sands, forming the well-known teris Blown sands. of Tinnevelly, where they are developed on a far larger scale, and the white sands forming the coast dunes. In South Travancore, as far as my observation went, the red sand hills are no longer forming; all are undergoing the process of degradation by atmospheric agencies at various rates of speed. The red sands have in many places ceased to yield to the influence of the winds and have arrived at a condition of fixity and compaction caused by the action of rain falling upon the loose sands percolating through them and during heavy showers flowing over their surfaces and washing the lighter clayey and smaller, though heavier, ferruginous particles down the slopes of the hills or into hollows on the surface, where, on drying, a fairly hard, often slightly glazed. surface of dark red loam has been formed. This loam is very fairly fertile and soon becomes covered with vegetation, which further tends to bind the mass together and render the surface secure from wind action. The loose sand, deprived of the clayey and finer ferruginous particles, wuold, unless unusually coarse in grain, be carried off by high winds elsewhere or remain in barren patches on the surface. I believe this process has gone on extensively over many parts of South Travancore and explains the existence, on the surface of the country and resting indiscriminately on the gneiss and the younger rocks as the Warkilli sandstone, of the great thick sheets of pure red loam which have not been brought there by ordinary aqueous deposition nor formed in situ by the decomposition of the underlying rocks. The percolation of the rain water through the mass has in many places given rise to the formation of concretionary ferruginous masses, which are often strongly lateritoid in their aspect. The quantity of clayey matter and of iron ore in the form of magnetic iron is very great in the sand of many of the teris. greater quantity of the water falling on the teris, as on their blown sand surfaces, escapes by percolation, and it is a common phenomenon to find springs issuing around the foot of the sand mass during the rainy season and becoming dry in the hot or rainless season.

"The teris in South Travancore which still retain their character as accumulations of moving red sands are four in number and all very small, the largest not measuring one square mile in area. They are all close to the coast and with one exception stand high and conspicuous to ships passing along at a fair distance. The largest and most conspicuous is that at Muttum which caps the high ground with a new lighthouse. The process of fixation has gone on here largely and the moving sands cover a much smaller space than does the fixed portion. The same may be said of the teri resting on the south-eastern extremity of the Kolachel sandstone plateau. To the north-west of Kolachel are two much smaller teris at the distance of 3 and 5½ miles respectively. In both of these also the area of the fixed sand far exceeds that of the loose. Especially is this the case in the more northerly teri near Melmadalathorai. Here the fixed part has undergone tremendous erosion and is traversed by long and deep rain gullies, with vertical sides up to 20 or 25 feet high. Gullies on a yet larger scale are to be seen at the south-east corner of the Kolachel sandstone patch and at the eastern side of the Muttum patch. Very large but shallower gullies are to be seen at the south-east corner of the Nagarkoil patch, where there is a very large fixed teri.

"The small teri immediately behind Cape Comorin is a very poor specimen of its kind, and, in fact, hardly deserves to rank as one owing to its pale colour and poverty in iron sand, but it will not do to class it as a coast dune, as it consists mainly of silicious sand, while the true dune at the Cape consists mainly of calcareous sand composed of comminuted shells, corallines, nullipores, etc.

"The sand of the typical teris is silicious or ferruginous (magnetic iron), the former being well rounded and coated with a film of red-oxide of iron, which is removable by boiling in nitric acid for a few seconds. Common as garnet sand is on the beaches of South Travancore, I never yet found a grain of it in the teri sand, where the latter was pure and had not been mixed with beach sand.

"The coast dunes of South Travancore are, except close to the Cape, in no way remarkable. A large patch of small hillocks to the north-west of the mouth of the Kulitorai river was caused by the wind shifting a great mass of sand turned out when the new canal was dug and heaped up on the north bank of the canal.

"Some tolerably high ridges occur three miles southwest of Kolachel. The sand here contains so much fine magnetic iron that it looks in parts of a dark grey colour, shading here and there almost into absolute black.

"A considerable quantity of blown sand fringes the coast from the Muttum headland eastward to Cape Comorin, and between Pullum and Culladevella forms some considerable hills. At Covalum, the highly calcareous beach sand which forms many low hillocks has been solidified in

saveral places into coarsa shelly limestone. The Helix bed at Cape Comorin already referred to, when treating of the Marine beds, is really an altered sand dune, the calcareous matter of which has, by percolation of acidulated water, been dissolved and re-deposited, on evaporation of the water, as a sub-aerial travertine. Countless thousands of Helix vittata and a considerable number of shells of Nanina tranquebarica, the two commonest land shells in this part of India, have been enclosed and fossilised in the formation of this travertine, which is evidently in constant progress. The immense wealth of shell fish of all kinds, added to large quantities of corallines and nullipores, incessantly thrown up by the surf, furnishes an abundant supply of calcareous sand for the formation of this travertine, which forms a bank more than a mile long and rising some 80 feet or more above the sca at its highest point. Its inland extent cannot be ascertained, as it is covered by loose sands. 16 probably only extends 200 to 400 yards inland and abuts against a low ridge of gneiss.

"A few tiny fringing reefs are to be seen half to three-fourths of a mile west of the Cape, half in the surf at low tide, and wholly in it at high tide. They are now to be considered as dead Coral Reefs. reefs, abandoned by the polypes that built them. I examined most of them carefully, without finding any live coral, and was inclined to doubt the correctness of my inference, drawn from their tabular shape and many shallow basin-like cavities; but later on, when examining some identical fringing reefs off the Tinnevelly coast to the south of Kudankulam Trigonometrical station (the south point of the Cape Comorin baseline), I found a considerable quantity of live coral lining the sides of the little basins and equally large quantities of coral quite recently dead in adjoining basins.

"A great deal of shell debris, sand and broken stone, is included in the mass of the reefs which in several places

have formed around masses of rock standing in rather shallow water, and joined up many loose blocks of stone tossed on to them by the surf into tremendously coarse conglomerates. Some similar reefs, but of rather larger size, occur along the coast to the rorth-east of Cape Comorin; in these the tabular mass extends from 10 to 40 and 50 feet in width, from the shore to the constantly surf-beaten outer edge. In one or two places parts of the reefs had evidently been founded on sands, which had been washed away, leaving an unsupported surface of many square yards in extent which the surf of the next high tide or first gale of wind would either break up or else again support with sand washed under it. These little reefs are worthy of much closer examination than I was able to bestow upon them.

"The coral fauna of the Cape Comorin sea is on the whole a remarkably poor one, as far as one may judge by what is to be found thrown up on the beach. Dredging might reveal much more, but unfortunately no boats are found there, only kāttumarams (Catamarans) which would not be the most convenient form of craft from which to carry on scientific observations. The sea here is, however, so very rich in animal life in many forms that it could assuredly afford a rich reward to anyone having a suitable vessel at command. I obtained in a very short time a far larger number of species of shells here than at any other place on the Indian coast.

"The prevalent soils (of South Travancore) are red ones varying in the quantity of their ferruginous element. The red soils seen inland near the main trunk soils.

Soils. road are chiefly formed of gneissic debris by sub-aerial decomposition. The origin of the deep red sandy or clayey loams has already been discussed. They occupy no inconsiderable area. True alluvial soils occur very rarely, if at all, now-a-days; those which fill the bottoms of the many valleys and creeks in

which paddy is cultivated being greatly altered from their original condition by centuries of cultivation, and the addition of various mineral, vegetable and animal manures. Estuarine beds full of sub-fossil shells, Cytherea, Pottamides, Melania, etc., of living species are exposed in the salt pans at the mouth of the Kolachel nullah.

"The alluvium in the valley of the Paleyar, which flows south from the west flank of Mahendragiri past Nagercoil is, where pure, a coarse gritty silt." The recent formations in North Travancore consist mostly of the sandy tract between the sea and backwater.

Before passing on to the next topic it will be worth while to make mention of a peculiar formation of limestone in the Ārāmboly Pass in South Travancore on account of its geological interest. The limestone closely simulates leptynite, the prevailing country rock in this region, and has a slight cream colour. It is confined to the zone of weathering. However, garnet, quartz, magnetite, and ilmenite may be seen in the limestone as in the leptynite. The gneissic structure too is kept up in the altered product. When the limestone is treated with dilute hydrochloric acid, the carbonates are readily dissolved, leaving behind an insoluble residue consisting of grains of all the above original minerals present in the leptynite, felspars excepted. Hence the surmise is that the limestone has been formed by the chemical replacement of felspars by calcium carbonate. It occupies only a small area within the State.

Economic Geology.

Monazite is a phosphate of the cerium group of metals essentially and contains a varying percentage of thorium oxide. It forms one of the constituents of the beach sands and coastal sand-dunes between Cape Comorin and the Kayamkulam bar. North of Kayamkulam it is not

usually found in the littoral sands. The crystalline rocks are its primary source. Pegmatites in which the mineral is more concentrated have also been found. The thoria content ranges from four to fourteen per cent. Two samples of monazite from Travancore were completely analysed by the Imperial Institute, London, and they gave the following results:—

| | | I | 11 |
|----------------------------|-----|--------|-------|
| Thoria | ••• | 10.22 | 8.65 |
| Ceria | ••• | 31.90 | 61.11 |
| Lanttana and allied oxides | ••• | 28.00/ | 02 22 |
| Yttria and allied oxides | ••• | 0.46 | 0.65 |
| Ferric Oxide | ••• | 1.50 | 1.09 |
| Alumina | ••• | 0.17 | 0.12 |
| Lime | ••• | 0.20 | 0.13 |
| Silica | ••• | 0.90 | 1.00 |
| Phosphoric acid | ••• | 26.82 | 26.50 |
| Loss on ignition | ••• | 0.46 | 0.45 |
| | | 100.63 | 99.67 |

Bearing in mind that the whole of the Indian production of monazite is now confined to Travarcore, the following observations will be of help in gauging the importance of the mineral to the State. "India possesses by far the largest reserves of monazite known in the world, and these, as regards quality measured in terms of thoria contents, are superior to any others." Monazite is chiefly worked for thorium which is used for the manufacture of incandescent gas mantles and for cerium employed in making pyrophoric alloys. Thorium finds another use in radio tubes.

There is a very interesting occurrence of an uranium bearing green mineral at Kuttakuli in South Travancore. It has been provisionally called "green monazite". Kuttakuli, the place where this mineral is found is a laterite hillock. In the thick laterite deposit underground are found the green mineral, quartz, graphite, zircon and tourmaline. It is sporadic in occurrence and is not met with in quantities sufficient for exploitation. A specimen of it was analysed at the Imperial Institute, London, and its chemical composition showed the following:

Thoria (Th0₂) 29·45 per cent. Ceria, Lanthana and allied oxides 27·43 ,, Uranium oxide (U_3O_8) 6·56 ,, Phosphoric acid (P_2O_5) 25·90 ,,

The analysis is only partial. Uranium ores are valuable for the radium they contain.

Ilmenite, titanate of iron, is by far the greatest constituent of the heavy sands on the Travancore coast. There are also big sand dunes near the seashore which contain a good percentage of ilmenite sand. Ilmenite. North of the Nindakara bar for a distance of about six miles ilmenite forms in some places nearly 75 per cent. of the sands of the beach and the coast dunes, some of which are about twenty feet in thickness. There is thus quite a plentiful supply of ilmenite in Travancore. Its titania content compares very favourably with the theoretical percentage which is exceeded not infrequently; this is probably due to the alteration product, leucoxene, and the presence of rutile. Travancore ilmenite now constitutes a very large percentage of the total world production of the mineral. The annual production of the State now exceeds a lakh of tons. By far the most extensive use of ilmenite is in the manufacture of white paints consisting essentially of titanium oxide. Titanium oxide possesses high tinting strength; it is non-poisonous and offers considerable resistance to chemical actions. It is used in enamels, lacquers, printing inks, artists' colours, linoleums, ceramics, cement, artificial leather, artificial marbles, rubber goods, soan,

cosmetics, artificial silk, paper, etc. Titanium finds a use in metallic alloys-ferrotitanium and ferrocarbontitanium.

Zircon, ortho silicate of Zirconium, is also a constituent of the beach and dune sands of Zircon.

Travancore and is recovered, as will be evident from the following paragraph, in the processes of separation of ilmenite and monazite. The results of analysis of a sample of zircon sand from Travancore, made by the Imperial Institute, are given below:—

| Silica $(Si0_2)$ | ••• | 29.89 |
|------------------------------|-------|-------|
| Zirconia (Zi0 ₂) | ••• | 62.23 |
| Titanium Oxide (Ti02) | ••• | 4.25 |
| Cerium, lanthana and a | llied | |
| oxides | ••• | 1.88 |
| | | 98.25 |

Zircon is used for the preparation of Zirconium oxide, a highly refractory material suitable for crucibles and high temperature cements. It is also employed for the preparation of Zirconium.

All the three minerals mentioned above, monazite, ilmenite and zircon, are generally found associated together. They have nearly the same specific gravity, 4.5 to 5, and hence are brought together by the combined action of waves and currents. The total superficial extent of the deposits is estimated to be about 1,400 acres. The separation of the various constituents of the crude sand is effected by taking advantage of their range in specific gravity and their electro-magnetic property. The crude sand is scattered on a dry concentrating table which has a jigging motion and is subjected to a film of air under pressure. This air film causes the minerals to arrange themselves vertically in the order of their specific gravities, the heaviest being at the The most efficient method of separation is the electro-magnetic. The crude sand in thin films is made to travel just beneath the poles of an electro-magnet. The

constituent minerals are attracted towards the electromagnet in varying degrees. Ilmenite is the most magnetic, monazite weakly magnetic, zircon and quartz non-magnetic.

Though the presence of silliminite in the beach sands was recorded more than two decades back, its separation on a commercial scale became an accomplished fact only recently with the Silliminite. adoption of floatation processes by one of the concessionaries. This typomorphic high temperature mineral clearly shows that the crystalline rocks of Travancore have undergone an advanced grade of metamorphism. Large deposits of silliminite are known to occur in some other places in India, viz., Sona Pahar, Nangstoni State, Assam and Pipra, Rewa State and Central India. But they suffer seriously from the disadvantage of high freightage. Therefore a bright future can reasonably be expected for Travancore silliminite. Silliminite is a refractory material very useful for the ceramic industries, especially electrical procelains and laboratory wares, for the manufacture of refractory bricks and what may be termed "Mullite" refractories. The results of analysis of a sample of silliminite sand from Travancore is given below:-

| $\mathrm{Si0}_{2}$ | ••• | 36.21 |
|----------------------|-----|---------|
| Al_20_3 | ••• | 51.46 |
| Ca0 | ••• | 3.40 |
| Mg0 | ••• | 0.035 |
| Fe_20_3 | ••• | 5.24 |
| $\frac{K_20}{Na_20}$ | ••• | 2.38 |
| Loss in ignition | ••• | 1.60 |
| | | 100.325 |

Concentrates of garnet sand of crimson colqur are found in the beach of Cape Comorin and Muttam. At one time garnet used to be exported from Travancore, It is an abrasive material.

It has often been asked whether gold occurs in Travancore. The numerous quartz veins found in the crystalline rocks were investigated by Dr. King, but he did not hold out any bright pro-Gold. spects for finding gold in them. However, the existence of gold in the State has been actually proved. Some samples of sand collected from the bed of the Pallivasal river in 1099 M. E. (1923-24) showed on assaying appreciable quantity of gold. Subsequent search proved of no avail. Gold is one of the most universal of all metals and it may be found in small quantities in all geological formations. Therefore, to determine the chances of finding payable quantity of gold occurrence in Travancore further proof is required.

Iron ore is found in some quantities. But the supply does not appear to be sufficient for working it on modern commercial lines. In the Shenkotta taluk Iron. iron is obtained as black sand in the brooks in Pūlankudiyiruppu and Achanputhūr villages. It is said that two persons working daily can take 7½ kōttas or 126 paras of the sand in a month and that four paras of this sand smelted with forty paras of charcoal and ashes yield about eighty pounds of iron. The selling price was found to be less than the cost of manufacture. Hence the industry has been given up. Iron is also found at Pralakāt in Chērānallūr Pakuthy, Kunnathunad taluk. Here the out-turn is said to be 10 lbs. for every 100 lbs. of the ore. Iron ore is reported to be found at Aramboly in large quantities at a depth of 15 or 16 ft. This place was once noted for its iron smelting industry. As large quantities of foreign iron began to be imported, the industry had to be given up here also.

At Mylādi, till about sixty years ago, the people earned their livelihood by gathering iron ore at the foot of the Poranathumala after heavy showers, when the ore was

washed down from the top of the hill. This they used to remove in baskets to the nearest rock and, holding up the baskets at sufficient height, allow the contents to drop down by degrees against the smart and steady breeze which carried away the sand and rubbish leaving the ore behind. They used to take the ore thus sifted to their houses where they smelted it into lumps of varying sizes and sold the same to the blacksmiths, who turned them into agricultural implements, etc. It is reported that tools made of this iron would last considerably longer than those made of imported material. But no iron is mined now.

Rare minerals, such as Thorianite, Aeschynite, and
Hatchettolite are reported to occur in
Travancore. But there is no definite information about their occurrence.

The China Clay deposits, as previously remarked, claim special notice. It occurs in many places as a bed in the Varkala formation. Extensive deposits China Clay. of good quality are found on the shores of the Ashtamudi Lake. Thus at Kanjirode near Quilon China Clay is exposed to view and is one of the most advantageously suited for exploitation. It can be mined without much difficulty. A very large quantity is available in this region.

Travancore clay compares very favourably with that obtainable elsewhere. The Director, Geological Survey of India, examined a sample placed with him some time back and remarked:— "The clay has been tested by ignition at a white heat and is found to be quite infusible; it shows no sign of discolouration; it is also exceedingly plastic and there is, therefore, no doubt that it would make a very excellent China Clay." A sample of clay from Kānjirode was sent to Bombay and on a comparison with one of the reputed brands of refined clay marketed

to the textile mills it was found to be on a par in almost every respect. In fact, any body who sees it is impressed with its high quality. Provided the clay is won by methods suitable and economic, and refined properly so as to satisfy the requirements of the consumers, the possibilities are immense. The refining of China Clay and the manufacture of porcelain are now actively engaging the attention of Government. Work has already been started.

Many and varied are the uses of the China Clay. Ceramics consume the largest quantity. As a sizing material for cloth it is in good demand. China Clay finds much use as a filler and loader for paper. It is also used in the manufacture of paints and for clarifying turbid liquids. It is one of the ingredients in toilet powders and cosmetics, cleanings, powders and soaps, pills, disinfecting powders, etc.

The following is the result of the analysis of a sample of China Clay at Kundara, Ashtamudi Lake.

Ultimate analysis.

| Si0. | ••• | 47.00 |
|------------------------|-----|-------|
| Al_20_3 | ••• | 38.00 |
| K_20 | ••• | 0.06 |
| Na_20 | ••• | Nil. |
| Ca0 | ••• | Nil. |
| Mg0 | ••• | 0.04 |
| $\mathrm{Fe}_{2}0_{7}$ | ••• | 0.02 |
| $\mathbf{Fi0}_{2}$ | ••• | Nil. |
| H_20 | ••• | 14.00 |
| | | 99.12 |
| | | |

Graphite is one of the most widely distributed economic minerals in Travancore. It occurs both in the charnockites and leptynites. General Cullen was the first to note the occurrence of graphite in Travancore (in 1845.) From 1898 to

1912 Messrs. Morgan Crucible Co., Ltd., were mining graphite and in all they raised about 35,000 tons from the mines at Vellanād, Cullen and Vengānūr. Since 1912 there has been no mining. Graphite is used for making paints, crucibles, lubricants, lead pencils, polishing powder, etc.

The Mica mined in Travancore is of the phlogopite variety. Kalkulam taluk was formerly the chief centre of mica mining. Some mica is now being Mica. Some mica is now being mica is chiefly used as an insulator in electric apparatus and appliances; it is also in demand for paints, wall-paper, lubricants, etc.

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A Typical Mountain Scenery.

CHAPTER IV.

FLORA

The Flora of Travancore presents a great variety. But the work of botanical research has not been commensurate with the opportunities which the richness of the species affords. Many thousand years before the commencement of the Christian Era the people of India knew the plants which were useful to them for food and serviceable as medicine. The Amarakōśa devotes a whole chapter to the enumeration of plants. But the ancients do not appear to have developed botany as a science irrespective of the utilitarian aspect.

Classificatory botany was not, however, unknown to the people of this country. Such names as Chemparuthy, Attuparuthy, Sima Chakka, Ayani Chakka, clearly show that a binomial system of classification was in vogue. The points of difference existing between the different varieties of cultivated plants such as plantain, rice and mango were appreciated by them. Their practical knowledge of classificatory botany was so thorough that they could at a glance identify the hundreds of varieties in the field. The classification however was restricted to the economic plants. There is one interesting feature in the formation of these names which may be noted. In the binomials evolved in this manner the part of the name indicating the species is put first, while the part of the name indicating the genus comes next. It need hardly be said that the order of arrangement of the generic and specific names in the present system of scientific nomenclature is just the reverse.

Botanical study of the different species of plants which grow in this country was first taken up by officers of

the Forest Department. Of these, Mr. T. F. Bourdillon was the most prominent and practically the first. His book "Forest Trees of Travancore" records 582 indigenous trees found in the State, and he has only casually mentioned a few of the more important climbers. The herbarium collection made by him comprises a large number of shrubs, climbers, herbs and grasses. Mr. Rama Rao who succeeded him as Conservator of Forests prepared a further list. It was then discovered that several of the plants described in Hooker's 'Flora' and other books on Botany were found in Travancore. Specimens from the Travancore collection have been repeatedly borrowed for purposes of identification and study by various institutions interested in botanical studies, including the Kew Gardens, England.

The Department of Agriculture is also interesting itself in the study of plants. There is a Chair of Botany in His Highness the Mahārāja's College of Science, Trivandrum. It is hoped that the Travancore University will encourage work in this direction; for, it is believed that in the large variety of plants in Travancore will be found many of scientific and commercial interest.

"The vegetation and Flora of Travancore are of exceptional interest, first, because they are the relic and development of a flora which was at one time uniform over a large part of India, secondly, because of the extraordinary variety of species occurring within a small area, and thirdly, because many of the species have been taken as types of plants with which others from all parts of the world have been compared."

Though within the Tropics, the sea, the lagoons, the net work of rivers and the chain of mountains wonderfully modify the climate of the country and make it suitable for the habitation of a wide range of plant life. The climatic conditions range from the scorching tropical heat to the bracing temperate climate, fostering a dense vegetation which is particularly rich in species.

On this aspect of the Travancore flora, T. F. Bourdillon writes:--"Owing to the geographical position of the country the flora of Travancore comprise that of Malabar and Ceylon, but it also includes many species of wide distribution, while, on the other hand, there are not a few which are peculiar to the State itself or are found in the southernmost part of the peninsula, that is. Travancore and Tinnevelly. The number of these endemic species will probably be largely augmented by new discoveries. An interesting fact which I have referred to elsewhere (Malabar Quarterly Review) is that we have many species which greatly resemble but are yet different from the species found in the Malaya Peninsula which has a very similar climate. It is probable that at one time a continuous stretch of forests extended all over India connecting these two distant regions and that the parents of these similar species flourished somewhere in the area between them."

Travancore which experiences the climatic variations of almost the whole of India shows great variations in the matter of its vegetation. For such a small area its vegetation is extremely varied exhibiting a number of different types of plant formations. The contour of the country towards the extreme south as well as in the north and north-eastern parts is such that the whole land may easily be partitioned into a number of more or less well-defined botanical zones, each with its peculiar plant forms.

The slopes of the Sahyādri Hills, ranging in height from about 1,000 ft. at the extreme south to nearly 9,000 ft. at the north-eastern end descend almost precipitately towards the sea. The western side of this chain of mountains receives the maximum atmospheric precipitation and consequently these slopes are clothed with a dense mass of vegetation characteristic of the tropical rain forests. Towards the south, in contrast to the tropical rain forests, we meet with an entirely different type of forest land. This is the deciduous monsoon forest belt.

The dry zone.

In the taluks of Thovala and Agastiswaram of the Southern Division, where rainfall is the least, a dry vegetation almost comparable to that of the neighbouring Tinnevelly district is found. Tamarind, Thespesia, Melia, Ficus, Callophyllum, Crataeva and Palmyra are the predominant tree types found in this region. The xerophytes like Cereus, Opuntia, species of Euphorbia and Agave, climbers like Leptadenia, Tylophora, Cephalandra, Cadaba, e.c., shrubby forms as Barleria, Acacia, Carissa, Lantana, Dodonea, Notonia, Phoenix, and Anona, form the special feature of the vegetation of this region.

The sub-tropical zone with warm temperate climate.

At Devikulam, Anamalai and the neighbouring hills above 5,000 ft. the climate is similar to that of the temperate zone except for the higher rainfall. The plants here are mostly of the herbaceous type, which are all pubescent, hairy and often aromatic. Trees are rare, but of those present the majority are not generally found at lower altitudes. Pinus Sylvestris, species of Cupressus and Eucalybtus are some of the main tree types found in this region. Shrubby forms are rare but many under-shrubs, perennial herbs and grasses are met with. Bulbous plants as Lilies, terrestrial Orchids with tuberous roots as Habenaria, Peristylis and Satyrium, and strongly scented species of Labiata, several species of Umbellifera, and Composite are the most common forms of vegetation in this region. Several ferns, shrubby species of the family Rosacea, Myrtacea, Ternstramiacea, epiphytic forms such as Mnium, Lycopodium, Selaginella, are the other forms met with here. The tea shrub (Camellia thea), a perennial plant which was introduced into India from China, is now extensively cultivated in these regions. From the

statistical returns it is found that no less than 48,000 acres are under this crop.

The sub-tropical zone below 4,600 ft. and above 3,000 ft.

The trees growing in this zone are adapted to a warmer habitat, such as species of *Eucalyptus*, *Grevellea*, *Casuarina*, *Erythrina*, *Bombax*, etc.

Species of Rubus, Rosa, Memecylon, Ternstræmia, Alsophila, Peperomia, Sonerila, Medinella, Aeschynanthes, are some of the other important plants found in this region.

The Rain Forest Tract.

The true tropical rain forest area is practically confined to the north-eastern corner of the State, where there is a mean annual temperature with a rainfall of over eighty inches, evenly distributed throughout the year. The climate in this tract is, therefore, warm and moist and the vegetation most luxuriant. Giant trees ranging in height from fifty to one hundred feet or more are seen in this region. On the trunks of these gigantic trees could be seen orchids, ferns and other forms of epiphytes.

Lianes with their strange and curiously shaped climbing stems are very common in this tract. Among the more important of these lianes are species of Bauhinia, Entada, Cocculus, Combretum, Strychnos, Hugonia, Vitis, etc. Particularly striking are the climbing aroids such as Pothos, Philodendron, Monstera, etc. The decaying organic matter formed from the fallen leaves and other vegetable debris affords an excellent substratum for the growth of saprophytic plants such as orchids and fungi.

Plantations of Para Rubber (Hevea Brāsiliensis) are seen in parts of the forest which enjoy an average of 75 to 150 inches of well distributed rainfall. The finest rubber in India is to be found growing in the Thodupula,

Mundakayam, Rānni and South Travancore forests. About 52,000 acres of forest land are now under Para Rubber in Travancore. The annual export is about 1,300 tons.

At elevations above 2,500 feet, especially in the Cardamom Hills, are seen the cardamom plantations, where the two distinct varieties known as Malabar and Mysore cardamoms are grown. Over 50,000 acres of evergreen forest land are now under the crop in Travancore. The yield varies from 200 to 500 lbs. per acre.

On the slopes of mountains, at an elevation ranging from 1,000 to 4,000 feet above the sea-level, could be seen coffee plantations. The industry is, however, not thriving in Trayancore.

The Monsoon Forests-1,500 to 2,500 ft.

The forest lands of the middle and south Travancore, unlike those of the north-eastern regions, are not evergreen. The rainfall is relatively high and is not uniformly distributed. The chief character to be noted regarding this forest is the leaf-fall which occurs at the commencement of the dry weather. The undergrowth of the forest is less dense. Large clumps of bamboos and dense growths of Ochlandra play an important part in the making up of the forest flora of this region. Tectona grandis, species of other trees as Pterospermum Sterculia terminalia and reticulatum, Dalbergia latifolia, Pterocarpus marsupium are generally seen growing in this region. Lianes and epiphytes are also found as sub-formations. At the lower elevations of the monsoon forests are found Cycas circinalis, while at higher elevations are seen Angiopteris both of which are interesting to botanists.

Forest swamps are seen in the rain forests as well as in the monsoon forests. These areas being located at the bottom of the valleys or surrounded by hills on all sides, never become completely dry. In Mannan Kandam and Muthukulivayal, the two typical forest swamps, could be seen the typical vegetation of the swamps of the forests. Several species of grasses, *Cyperus* and *Eriocaulon*, form the predominant associations of these swamps.

In the rushing mountain streams are seen several species of the family *Podostemonacew*, a family of flowering plants specially adapted for living in such localities.

Midland Regions.

The whole area lying between the base of the hills and the narrow coastal land may be considered to form the midland region. The vegetation, though varying slightly from place to place, is, on the whole, similar. The whole of this area is habitable and the chief types of food crops and other economic plants are grown in these regions.

The soil of this area to a considerable depth is made up of the sediment carried down by the rivers. The ground

is almost constantly moist, marshy or even covered with water during the major part of the year. In some parts the water becomes slightly saline during certain months.

The vegetation of this place is therefore either typically hydrophytic or helophytic. In this area could be seen the submerged species of Chara, Nitella, Ceratophyllum, Utricularia, Hydrilla and Potamogeton. In shallow waters near the land grow Blyxa, Aponogeton, Ludwigia, Limnophyla, Marsilia, Myriophyllum, Hygrorhiza, Jusseiaea, Neptunia, etc., while in calmer waters, could be seen associations of Nymphaea and Limnanthemum.

The water-hyacinth (Eichornia Crassipes) which is a native of South America has during recent years penetrated successfully into most of our canals and waterways. It is an unwelcome guest and has become a very troublesome weed. There is reason to believe that this plant was introduced some time after 1900 A. D.

Along the margins of the backwaters and at the estuaries of the larger rivers of the north there is found a type of plant-growth known as the manwaters and river- grove vegetation which shows mouths. peculiar features. The backwaters, since they have connection with the sea in several places, are subjected to the periodical rise and fall of water. A scaffold of bow-shaped stilt-roots are found in most of the plants that grow in this area. These stilt-roots not only function effectively as a support for the stem but also allow easy passage to the flow of tidal waters. The plants that grow in this region are distinctly xerophytic in character. The chief representatives of the Mangrove formation are Rhizophora species, Bruguiera conjugata, Ceriops Candolleana, Kandellia, Lumnitzera, Carappa, Sonneratia, Aegiceras. Avicennia, Pandanus, etc.

Close behind the Mangrove break may be seen Barringtonia, Cerbera Manghas, Terminalia catappa, Calophyllum inophyllum, Hibiscus tiliaceous, Acanthus ilicifolius, Pandanus, species of Derris, Ipomoea etc.

In South Travancore which enjoys a peculiar dry climate the Mangrove vegetation is practically absent.

Saline swamps are often met with in North Travancore in the neighbourhood of backwaters, where salt-water may percolate from the adjoining brackish water. Plants like Atriplex, Sueada, Salicornia, Mollugo, Trianthema, Portulaca, Tribulus, Phyllanthus are seen growing in such locality.

The zone nearest the sea consists of loose shifting sand exposed to the full force of the sea-breeze. Due to the action of the strong breeze which prevails in this region, the sand becomes heaped up in a series of dunes. Ipomoea pes-caprae, Canavalia ensiformis, Spinifex squarrosus, Cyperus etc., are found growing in this sandy region.

On the shore near the wave-line and attached to the rocks could be seen large formations of *Ulva*, *Enteromorpha*, *Halimeda* and *Caulerpa*, *Sargassum*, *Padina*, *Ectocarpus*, *Gracilaria*, *Polysiphonia*, *Chrysmenia*, *Corallina* and *Ceramium*.

Several forms of Algae may be seen in other aquatic or terrestrial environments. The terrestrial forms do not get immersed at all or only periodically become covered with water.

Various terrestrial forms of Chroococcus and Glaocapsa, the terrestrial and semi-aquatic forms of Nostoc, the free-floating forms of Anabaena, the terrestrial and freefloating forms of Rivularia, several forms of Oscillatoria and Lyngbya are the most common forms of blue-green algae met with in the State. Species of Zygnema, Spirogyra, Desmidium, Cosmarium, Hydrodictyon, Chara, Nitella and Diatoms are some of the other forms commonly met with in the aquatic situations. These minute forms of plants growing in water reservoirs cause trouble in various ways. An examination of the forms occurring in the Willingdon Water Works, Trivandrum, showed that in addition to the Diatomacea, which by the way was very predominant, the following were present. Phormidium molla, Lyngbya martensiana Travancorica, Phormidium foveolarum and Phormidium henningsii.

Some work has been done in the identification of fungi. An underground fungus called *Mylitta lapidescens*, is used in South India as medicine and food. This fungus occurs like small tubers possessing a black wrinkled surface. The inside of the tuber is white and is marked with veins, When dug out fresh from the earth, the fungus is waxy in consistency. This fungus is allied to the truffles.

"In 1860 Doctor E. J. Waring forwarded to Mr. Hanbury some specimens of these tuberiform productions and they were examined by Mr. K. J. Berkeley and Mr. Currey. These specimens had been dug out from the

chalkbeds in the mountains between Travancore and Tinnevelly and the hill people were in the habit of bringing them to Trivandrum for sale. They are much esteemed by native doctors for various complaints, and they were regarded as diuretic."

There are a few useful species of fungi belonging to the *Polyporeæ* group found in Travancore. The bracketlike growths found on the jack tree are commonly known by the name of "Plamanjal".

Boletus Crocatus (Plāmanjal) is largely used as medicine on the West Coast. It is ground to a paste with water and applied to the gums in cases of excessive salivation. It is also applied to the mouth of children suffering from aphthae and given internally in diarrhoea and dysentery.

Many species of Fungi are edible, while there are others that are poisonous. The parasitic *Polyporce* are highly injurious to the trees on which they grow. They often cause death to the host plant. *Fomes lucidus*, *F. lignosus* and *F. lamawnsis* are other parasitic species which are believed to be partly responsible for the root disease (Kattu) of coconut palms in the State.

Mutta kalang or ona kumul is an edible variety of Agaricus which is found throughout Travancore. Care has to be exercised in distinguishing the edible varieties from the poisonous ones which bear considerable resemblance. Varieties having a slimy skin or possessing blue colour in the inside tissues are generally poisonous. According to Mr. Petch there is no "hard and fast rule by which a novice may attempt to identify an edible from a poisonous fungus". He holds that actual experience is the only test by which one could identify the edible from the poisonous form.

"Edible mushrooms contain some nitrogenous food and about 90 per cent. water. Eaten with other foods they are of great service in the diet on account of their flavouring properties". In Travancore stray growths of mushrooms are collected and used. Mushroom growing is not generally practised in Travancore, though in some places the growth of mushrooms is encouraged by the application of a thick coating of cowdung in favourable locations which the shrewd cultivator easily makes out.

"Bud-rot," a disease in coconuts, which is commonly found in Travancore, is attributed to a fungus *Phytophthora palmivora*. Almost all the members of the family *Palmae* are susceptible to the attack of this fungus which is doing a lot of havoc in the country.

Thielaviopsis paradoxa is the cause of the stembleeding disease of the coconut. This disease, according to Mr. T. Petch, is infectious. It is very widely distributed in Travancore.

Pestalozzia palmarum is another parasitic fungus which attacks the coconut leaf. It attacks the mature leaves of the palm, producing the disease known as "leaf-blight". Diplodia and Helminthosporium are two other chief forms of fungi which are often seen associated with Pestalozzia.

The root-disease of coconut trees, otherwise known as Wilt disease, is due mainly to the parasitic fungus, *Botryodiplodia*.

The forms enumerated in the preceding paragraphs are the chief parasitic fungi in the State.

(a) Indigenous Grasses Supplying Food Grains.

Oryza saitva. Paddy.

This is the staple food of the inhabitants of the State. There are a number of varieties now in cultivation.

Grasses. For burns and scalds rice flour is an excellent application. Great difficulty is experienced in the matter of nomenclature, as the same

variety is often known by different names in different localities.

Eleusine Coracana.

Ragi, Kel-varaku.

There are several distinct varieties of this cereal under cultivation. The grain is highly nourishing. This is cultivated in various parts of Travancore.

Panicum miliare.

Chāma.

This grows even under poor soil conditions. It is cultivated in several parts the state of as food for poultry, cattle and men.

Setaria italica.

Thena.

This is an important cereal which is generally grown as a rain-fed crop.

Coix lachryma.

This is cultivated, though not extensively, in several places. The flour prepared from the seeds is very nourishing and forms an easy substitute for barley.

Zea Mays.

Maize or Mokkachölam.

The introduced varieties of this are cultivated on a limited scale in several gardens as food grains. The stem is used as fodder.

Pennisetum Typhoideum.

Kambu—Spiked millet.

The grain is used as food for the poor. The stalk is used as fodder and in roofing. Ashes of the plant are used as an alkali in dyeing.

Sorghum vulgare.

Cholam and Paspalum scorbiculatum (Varaku) are other cereals cultivated in the warm dry tracts in Travancore. Paspalum is cultivated as a food grain and largely eaten. The grain contains a narcotic poison and is not a wholesome food. The straw is eaten by cattle.

(b) Other economic grasses.

Saccharum officinarum.

Sugar-cane-Karimbu.

A part of the State's supply of crude sugar is made from the juice of this grass. This is cultivated mainly in the central and northern taluks of the State. The juice is given as an antidote to metallic poison. It yields arrack, jaggery and sugar. The refuse of the cane after extraction of juice is called 'baggasee' and is considered suitable for papermaking. The root is considered demulcent and diuretic.

Andropogon squarrosus.

Rāmaccham.

This is very common in moist situations, especially in the margins of tanks and in tank-beds, where it serves as an excellent sand-binder. At Kulithura this is more or less extensively cultivated for its scented roots. The root of this plant is considered to be diaphoretic and preservative against cholera and is used in medicine for fever.

The roots are industrially important in that thatties, fans and mats are made for domestic use. In some places this is also known by the name of Vettiver. The actual Vettiver is obtained from a species of the plant Coleus belonging to the family Labiatæ. This plant is cultivated at Panchalingapuram near Cape Comorin for its scented root.

Cymbopogon flexuosus, and probably even C. nardus, C. citratus, are the economic grasses that supply the lemongrass oil. The plants are excellent sand-binders and,

therefore, when grown along roads and paths, check erosion. Lemon-grass oil is distilled from the above mentioned cultivated species of *Cymbopogon*. The northern taluks are the seat of the lemon-grass-oil industry. When the price of the oil reached its peak, several private individuals and small companies took to the cultivation of the grass. The industry is now gradually dying out. The returns for the year 1935—36 show that 7,43,047 lbs. of lemon-grass oil were exported from Travancore. The oil is stimulant, carminative, diaphoretic and antispasmodic. It is used in rheumatic swellings, sprains and head-ache.

Systematic cultivation of fodder grasses is not popular in Travancore. Recently, however, at the instance of the Agricultural Department the Sudan Grass, the Napier Grass and the Guinea Grass are being cultivated by the industrious agriculturists of the State. To the popular mind all the herbaceous annuals are grasses, being popularly called 'pullu'. *Pullu* is thus a very comprehensive term. Very little trouble has been taken in giving vernacular names to uneconomic plants. The following are some of the important grasses which are found growing wild in moist grounds.

Cynodon ductylon.

Beli Karuka.

This is a perennial grass with several creeping branches rooting at nodes. It is very much priced as a fodder. This grass is used in many of the religious rites of the Hindus. The grass is considered medicinal.

Panicum repens.

Perumkaruka-Inchippul.

This is a perennial grass with very stout underground rhizomes which send up stout aerial branches during the monsoons. This grows luxuriantly in moist situations and forms an excellent soil-binder.

Panicum-crus Galli Stagninum.

Kavada or Chethaveru.

This plant grows in moist localities, especially in rice fields, where it occurs as a troublesome weed.

Panicum crus-galli.

Variety Frumentaceum. This resembles stagninum very closely in all its essential characters except that it has no awns.

Other species which are useful as fodder are:-

Panicum colonum, P. prostratum, P. flavidum, P. isachne, P. psilopodium, Digitaria sanguinalis, Eleusine aegyptiaca, Eragrostis tenella, E. ciliaris, E. plumosa, E. bifaria, E. major, Sporobolus orientalis, S. indicus, Setaria glauca, Eriochloa polystachya, Ischaemum rugosum, I. pilosum, I. ciliare, Poa annua, Bromus asper, Andropogon contortus. A. pertusus, A. annulatus, A. pumilus, A. adscenseionis, Chloris barbata, Perotis latifolia, Leptochloa filiformis, L. chinensis, Rottboellia exaltata, Oplismenus compositus, Dinebra arabica.

The giant grasses (bamboos), consisting of several species, form one of the striking features of forest growth in Travancore. The identification of the Bamboos. several species of bamboos is a very difficult task as they flower at long intervals. The bamboo seed and the floury substance deposited in the joints of some of the species are economic products. The former is a food grain, while the latter is an article of medicine. The bamboos and reeds are used for a variety of pur-They supply posts and rafters for buildings and material for the manufacture of mats and thatties. many places light scaling-ladders are made with bamboos. It is estimated that no less than 25,000 tons of reeds can be annually extracted from our forests for the manufacture of paper.

At present there are in Travancore twelve distinct species of bamboos as recognised by eminent botanists, of which the most important are:—

Bambusa arundinacea.

The bamboo-Mula or Illi.

This is the commonest species found in Travancore. It is often cultivated and is therefore abundant in the plains. Bamboos are largely used for building huts and the branches are used for fencing. The stem is largely used for rafts in floating heavy timbers.

Dendrocalamus strictus.

The Male Bamboo-Kallanmula or Kalmungil.

This is confined to the drier parts of Travancore and is the most useful of bamboos. Fibre from the stem is suitable for paper making. The culms are strong and elastic and are used for lance-shafts, carriage shafts, masts of boats, posts and rafters of temporary buildings, scaffolding and mais of all kinds. The seed is eaten as food grain.

Dendrocalamus giganteus.

This is the gigantic species of Dendrocalamus. The culms of this bamboo are very long and stout.

Bambusa vulgaris.

The Golden Bamboo-Ponmüngil.

This occurs as an ornamental plant in many gardens. The culms are bright green or striped green and yellow. The species is used in basket making and to some extent in house construction.

Ochlandra travancorica.

Ītta or Vei, Īral.

The culms attain a height of ten to twenty feet and are one to two inches in diameter. It grows in evergreen

forests at low elevations. In Central and North Travancore it is planted along paddy field bunds as a soil binder. There is a very great demand for the culms of this reed for making mats, baskets and paper pulp. It is also used in building temporary huts.

Ochlandra Rheedii.

Ottal or Kolanji.

This grows in clumps mostly on the banks of rivers at low elevations. The culms grow to a height of fifteen to twenty feet and to one inch in diameter. They are much used for making baskets and mats. They are also useful in the manufacture of paper.

Plants belonging to this family resemble grasses. They are chiefly found growing in marshy situations. "Cyperus papyrus, was the source of the papyrus Cyperaceae. or writing paper of the Egyptians, the stems being cut into thin strips and pressed together while still wet."

In Travancore about one hundred species representing fifteen genera have been identified. Out of the one hundred the economic uses of only about eight have been recorded. Some of the species of Kyllinga and Cyperus are used in medicine, while the culms of two species of Cyperus are used in the manufacture of grass-mats and one of the species of "Scleria" affords material for thatching huts.

Kyllinga monocephala is a dwarf herbaceous growth found in low grounds. The root stock is used in medicine.

Kōrai-kilangu, Karimuthan or Muthangā-kilangu is the underground stem of Cyperus rotundus. It is used in dyeing and is fragrant. The rhizomes are used in medicine. The tubers of Fimbristylis junciformis, Kunth, are also used as a substitute for muthanga. Cyperus bulbasus, is another species of cyperus the underground tubers of which are used as food. The tubers of this plant are

devoid of the rank aromatic taste possessed by "muthanga kilangu". This plant is generally seen in the coastal belt and the root-tubers are collected and eaten roasted or boiled during times of scarcity.

Certain species of cyperus are used in the manufacture of grass mats which are locally known as "pullupā" or "Kōranpā." This is a cottage industry in the villages of Vadaśśēri and Thittivilai where the Muhammadans take it up as an auxiliary source of income.

The local mat weavers use sappan wood popularly known as chappangam for colouring the strands of fibre obtained from the Cyperus stem, before they are woven into mats. The fibre obtained from the leaves of Agave Sisalana is made into a sort of rough twine and is arranged lengthwise to constitute the warp of the mat.

Typha is the only genus belonging to this family. It has about twelve distinct species most of them being denizens of marshes. In popular language this Typhaceae. plant is called reed-mace, cat's-tail, or bulrush.

In the neglected tanks and marshes of South Travancore we find a species of Typha growing luxuriantly. The leaves of the plant are collected and dried for the manufacture of "Konkanees" which serve as water-proof covering for the labourers. Fancy "thatties" and mats may be made of the leaves of this plant. In making mats, thatties and konkanees the rough twines made of the fibre obtained from the aerial roots of Pandanus are used. Mats of convenient sizes may be made and used as thatching materials for temporary sheds in the place of matted coconut leaves. The use of typha mats as thatching material is highly economic inasmuch as they could be used continuously for years together with the maximum efficiency, while coconut leaves become useless in the course of a few months.

The typha-floss is at present not used to any extent in Travancore. It could, however, be used for stuffing pillows and cushions and a small industry could be developed on the products of this plant without any great capital or initial expenditure.

In some places fibrous materials are in great demand for putting up bunds in paddy fields. The fibrous stem of Typha may be successfully utilised for this purpose. This may also afford material to the paper manufacturer for the preparation of paper-pulp.

Out of 582 varieties of timber trees identified by Mr. Bourdillon those that are in common use are the Teak, the Black-wood, the Ānjili, (Ayani), Tham-Valuable Timber pakam, Vēnga, Irul, Thēmpāvu, Maruthi Trees. and the Jack. The usefulness of a timber tree is often judged by the degree of hardness it possesses. The important timber trees of Travancore are:—

Tectona grandis.

The Teak Tree. Thekku.

Fam: Verbenacea.

This is a very large, deciduous tree which, under favourable circumstances, grows to a height of one hundred and fifty feet and a diameter of eight feet. In Travancore this tree normally grows only up to a height of fifty to eighty feet and a diameter of about four feet. In the forests of South Travancore which enjoy a very dry climate it generally grows to a height of about thirty feet and an average girth of one foot and is generally known by the name of "Köl-teak". In the forest regions of the north where the rainfall exceeds 100 inches the tree attains its largest dimensions.

The heart-wood is of a dark-golden colour when fresh, turning dark-brown with age. The wood is hard and durable

and contains a valuable fragrant oil. Owing to the presence of this oil the wood is not attacked by white ants. As the wood does not warp and crack, it is considered to be one of the finest known timbers. It thrives best with a rainfall of 120 to 159 inches and in a temperature ranging from 60° to 90° and takes eighty to one hundred years to attain its full growth. Fifty or sixty years are required for a teak plantation to yield serviceable timber. It is generally used in house-building and for making furniture. Ploughs, yokes, harrows, carts, railway-carriages, looms, etc., are also made of this wood. Teak "should not be used for bridges and houses where it must bear a heavy weight." A very remarkable quality of the wood is that "once seasoned, it does not split, crack, shrink, warp or alter its shape. It works easily and takes a good polish and is of handsome appearance." A cubic foot of seasoned wood weighs about 55 lbs. or more. Malabar teak is esteemed the best. It is light, strong and durable whether in or out of water. Hence it is very good for ship-building.

The yearly out-put of teak amounts to about 5,40,000 cubic feet, fetching a value of about Rs. 6,00,000.

Dalbergia latifolia.

Itti or Thothagatti, the Black-wood or Rose-wood. Fam: Leguminosa.

This is another large handsome deciduous tree found growing throughout the forests of Travancore up to an elevation of 4,000 feet. The tree grows to a height of about eighty feet and a diameter of about four feet. The heartwood is dark purple in colour with black streaks and is very hard and strong. It requires a cooler temperature and higher elevation than teak. In strength it excels teak but it is more scarce and of slower growth and less adapted for plantation. The wood seasons well without warping or splitting and takes polish very well. It is highly valued for

furniture making. The weight of one cubic foot of seasoned wood is given by Gamble as 50 lbs.

Schleichera trijuga.

Pūvaņņu or Pūvam. The Ceylon Oak.

Fam: Sapindaceæ.

This is a large handsome tree of immense girth, which is commonly found in the deciduous forests up to a height of about 3,000 feet from the sea level. The wood is extremely hard, strong and durable and is therefore generally used for oil mills, carts, pestles, mallets, axles of wheels, teeth of harrows, screw rollers of sugar mills and cotton and oil presses. The wood seasons and polishes well. One cubic foot of wood, according to Bourdillon, weighs about 66 lbs.

The seeds yield an oil called "Macassar" oil which is considered to be a stimulating and cleansing application to the scalp.

Tamarindus indica.

Pulimaram. The Tamarind tree.

, Fam: Leguminosæ.

This is a large evergreen tree which grows to a height of about 120 feet and a diameter of about five feet. This is generally cultivated for its sweetish acid fruits. It is self-sown in waste and forest lands. The heart-wood is dark brown in colour and is very hard and heavy. One cubic foot of heart-wood weighs about 80 lbs., while the weight of one cubic foot of sap-wood is about 62 lbs. The heart-wood is difficult to work and is said to deteriorate if exposed to the weather. The wood is used in making oil and sugar mills, pestles, mallets, etc.

Artocarpus hirsuta.

Ayani or Anjili. The Jungle Jack.

Fam: Moraceæ.

This is a very tall tree which is commonly found in the evergreen forests of Travancore up to a height of about 300 feet above the sea level and also in the plains. The tree grows to a height of about 150 feet and a diameter of four feet. It yields a very valuable wood which is durable and moderately hard. It seasons well and is used for house-building, furniture and boats. The weight of one cubic foot of seasoned wood, according to Bourdillon, is about 35 lbs. "The wood does not warp or crack; it is not eaten by white ants and is straight-grained, durable and easily worked; and the timber can be obtained of large size." The wood is also suited for match boxes and splints.

The yellowish red soft pulp surrounding the seeds is edible. The seeds yield an oil and are also roasted and eaten by poor people. The sticky latex is made into bird lime and a brown dye is prepared from the bark.

Artocarpus integrifolia.

Plavu. The Jack Tree.

Fam: Moracea.

This is a large evergreen tree which is found growing in the evergreen forests up to a height of about 4,000 feet. It is planted throughout the country for its valuable fruit and wood. The heart-wood is bright yellow in colour but darkens on exposure. The wood takes fine polish, does not warp or split and is easily worked. It is largely used for building purposes and for making furniture and musical instruments. The weight of one cubic foot of seasoned wood is, according to Bourdillon, about 39 lbs.

The tree grows to a height of about one hundred feet and is planted in avenues as shade trees. The fruit is delicious, nutritious, demulcent and laxative. Unripe jack fruit is largely used for curries. The poor subsist on jack fruits during the season. The fruit of a superior variety called the honey jack (Varikka) is particularly delicious and is in great demand,

Diospyros assimilis.

Karinthāļi. Malabar ebony.

Fam: Ebenaceæ.

This is a large evergreen tree which is found growing in the evergreen forests of Travancore up to a height of about 3,000 feet above sea level. The trees are thinly scattered and are by no means very common. They grow up to a height of about seventy feet and a diameter of two and a half feet. The heart-wood is black, hard, heavy and straight-grained without streaks. One cubic foot of seasoned wood, according to Bourdillon, weighs about 69 lbs. The wood is chiefly used for furniture, ornamental work and in-laying.

Adina cordifolia.

Manjakadambu.

Fam: Rubiacea.

A tall deciduous tree found growing in the forests up to an elevation of 1,500 feet above sea level. The tree attains a height of one hundred feet and a diameter of four feet. The colour of the fresh wood is light-yellow but when seasoned it changes to a reddish-brown colour. The wood is close grained and admits of fine polish but does not stand exposure to water. It is specially recommended for cots. The weight of one cubic foot of seasoned wood, according to Bourdillon, is 45 lbs.

Lagerstroemia lanceolata.

Venthēkku.

Fam: Lythraceæ.

This is a very large tree which is commonly seen in the deciduous and drier evergreen forests up to an elevation of about 3,000 feet above sea-level. The tree possesses a smooth, thin, white bark which peels off in thin flakes. The wood is reddish brown in colour and straight fibred, and splits easily. It is moderately hard and is much in demand

for boat-building, though it does not stand much exposure. It can be used for furniture and house-building but cannot bear much weight. The heart-wood is not attacked by white ants. The wood is suited for match boxes and splints. One cubic foot of seasoned wood weighs 43 lbs.

Terminalia crenulata.

Thēmpāvu or Karumaruthu.

Fam: Combrataceæ.

This is a deciduous tree which grows to a height of one hundred feet and a diameter of three feet. The trunk is straight and cylindrical with black, deeply cracked bark. It occurs throughout the country up to a height of 2,000 feet above sea level. The timber is very largely used for house-building, carts and furniture but its strength and durability are variable. The weight of one cubic foot of seasoned wood is 60 lbs.

The bark is used in dyeing and tanning. The tassar silk-worm feeds on the leaves of this tree. The leaves are used as fodder. Lac is occasionally gathered from its branches. It gives a brown gum useful for colouring.

Pterocarpus marsupium.

Vēnga.

Fam: Leguminosæ.

This tree is commonly found in the deciduous forests up to an elevation of 2,500 feet above sea level. It grows to a height of about eighty feet and a diameter of two and a half feet. It is not gregarious. According to Gamble one cubic foot of seasoned wood weighs about 55 lbs. This is a very important timber tree in the State. The wood is considered to be durable. It seasons well and takes a fine polish. It is too heavy for furniture.

Hopea parviflora.

Thambagam, Kambagam, or Pongu.

Fam: Dipterocarpaceae.

This is a lofty evergreen tree which is found growing in the moist forests of Travancore up to a height of 3,000 feet. In the low country it may be seen growing along the banks of rivers. It is a fast-growing tree and well suited for plantation. The wood is light brown in colour when cut, but darkens on exposure. The weight of one cubic foot of seasoned wood is about 63 lbs. The wood is used for bridges, buildings and boats. Beams, rafters, railway sleepers and dug-out canoes made of the wood last for a long time. It is not attacked by white ants.

Dysoxylum malabaricum.

Vella agil. White cedar.

Fam: Meliaceæ.

This is a large tree which is found growing in the evergreen forests throughout Travancore up to an elevation of 3,000 feet. It grows to a height of one hundred and twenty feet and a diameter of five feet. The wood is yellowish in colour, hard and elastic. One cubic foot of seasoned wood weighs 48 lbs. The wood is pale yellow with a smooth silky vein, sweet-scented and is easily worked. It is sometimes used for furniture and house-building. It cannot stand exposure. But it is extensively used in the manufacture of oil casks, match boxes and splints.

Azadirachta indica.

Vēppu or Vēmbu—The Margosa or Neem tree. Fam: Meliaceæ.

This is a small avenue tree which is commonly planted in Shenkotta, Agastīswaram and Thōvāla taluks, but it grows in almost all places. The wood is hard and closegrained. Owing to the presence of a bitter principle in the wood it is not attacked by white ants. It can be used for making furniture and agricultural implements. The weight of one cubic foot of seasoned wood, according to Gamble, is about 50 lbs.

The stem exudes a clear gum. The bark is bitter and is used in the treatment of malarial fever. The twig is used as tooth brush; the leaves are pounded and used as antidote for poisons and itches. The bark, leaves, dried flowers and fruits are all used in medicine. The oil expressed from the seeds has a peculiar odour and is supposed to contain a good quantity of sulphur. An eminent authority states that in villages where the neem-tree is planted in abundance cholera never appears.

Cedrela toona.

Madagiri Vēmbu-The Red Cedar.

Fam: Meliaceæ.

This is a large tree which grows to a height of about one hundred feet and a diameter of about five feet. In Travancore it grows in the evergreen forests at elevations from 500 to 4,000 feet. The wood is fairly durable and does not split or warp. The heart-wood is neither attacked by white ants nor bored by beetles. The wood seasons well and is highly valued for furniture, house-building, and carving. It resembles Mahogani. The bark is astringent and yields a resinous gum. It is also used as a medicine in fever.

Lagerstroemia Flos-Reginæ.

Nīrmaruthu or Manimaruthu or Pūmaruthu.

Fam: Lythracea.

This is a large tree which is commonly planted in gardens and along avenues. It is also seen on the banks of rivers and near water-ways at low elevations. One cubic foot of seasoned wood weighs 41 lbs. The wood is smooth, close-grained, hard and brownish-red in colour. It is supposed to be very durable under water. It is, however, seldom used in Travancore.

Tetrameles nudiflora.

Chīni.

Fam: Datiscaceæ.

This is a large tree which is found growing in the evergreen and deciduous forests of Travancore. It grows up to a height of one hundred and fifty feet and a diameter of five feet. The almost unbranched cylindrical stem is supported by large buttresses. One cubic foot of seasoned wood weighs about 24 lbs. The wood is light and fairly durable. It is used for making dug-out canoes and teachests. It is also suitable for match boxes, packing cases and probably for ceiling planks.

Bombax malabaricum.

Mullu Elavu.

Fam: Bombacew.

This tree is found growing both in the deciduous and evergreen forests of Travancore up to an elevation of about 4,000 feet. It grows to a height of about one hundred and thirty feet and a diameter of eight feet. The root called musla is a stimulant and a tonic. The inner bark yields a fibre for cordage. The tree has no heart-wood. The wood is very soft and is therefore eaten by white-ants and bored by beetles. As the wood lasts longer in salt-water, it is used for making sea-going boats. Rough-hewn planks are used for tea chests, toys and matches. The cotton-like floss obtained from the fruits is used for stuffing pillows and cushions. One cubic foot of seasoned wood weighs about 29 lbs.

Xylia Xylocarpa.

Kadamaram, Irumul or Irul. Iron Wood.

Fam: Leguminosa.

This is a medium-sized deciduous tree which is found abundantly in Malayattur and Thodupula forests, but is absent in South Travancore. It is found growing up to an elevation of 2,000 feet above sea level. The tree grows to a height of about sixty feet and a diameter of two feet. The weight of one cubic foot of wood, according to

Bourdillon, is 59 lbs. The heart-wood is reddish-brown in colour and extremely hard. Owing to the presence of a resinous matter the wood is very durable and lasts well under water. It is used for house-building and for making boats, agricultural implements, tool-handles, paving blocks and bridges. The bark and saw-dust yield a large quantity of tannin. The seeds yield an oil which is used in medicine.

Mesua ferrea.

Nangu. Iron wood.

Fam: Guttiferæ.

This is a tree of moderate size which is generally seen in the evergreen forests up to an elevation of 6,000 ft. above sea level.

Karinangu (a small tree), manninangu (a mediumsized tree) and nīrnangu (a very large tree) are the three distinct varieties of nangu found in Travancore forests. The heart-wood is red, extremely hard and close-grained with long fibre. The weight of one cubic foot of this wood is about 69 lbs.

This is one of our very best timbers but is not used to any great extent because of the difficulty of sawing the logs. A cream coloured aromatic resin having demulcent property is obtained from this tree. The seeds yield an oil which is used in cutaneous diseases and sores. The leaves and flowers are used in medicine. The flower bud is used in dyeing silk. The root is an antidote for snake poison.

Mangifera indica.

Māvu. The Mango Tree.

Fam: Anacardiaceæ.

In the wild state it is commonly found in the moist forests up to an elevation of 4,000 feet above sea level. It is abundant in the low country and is cultivated for its fruits. The leaves are used for cleaning the teeth. The timber is used for making small canoes, rough planking and tea

chests. The wood is also suitable for match boxes and splints. One cubic foot of seasoned wood weighs about 42 lbs.

Vitex altissima.

Mayila.

Fam: Verbenacea.

This is a lofty tree found in the deciduous, open, dry forests of Travancore. It grows up to an elevation of about 4,000 feet above sea level. The tree grows to a height of about ninety feet and a diameter of four feet. The wood is hard, smooth and close-grained. It takes possible very well and is suitable for furniture, buildings and for carts. The weight of one cubic foot of seasoned wood, according to Bourdillon, is about 60 lbs.

Attunocchi, (V. leucoxylon) and Attumayila (V. pubescens) are two allied species possessing wood suitable for various purposes.

Gmelina arborea.

Kumbil or Umithēkku.

Fam: Verbenaceæ.

This is a small deciduous tree which grows up to a height of sixty feet and a diameter of two feet. It is widely distributed though not abundant. The wood is soft and is therefore easily worked. It does not warp or contract and is very durable under water. It is good for furniture, light planking, panelling, blinds and venetians, picture frames, organ pipes, sounding boards and other works. It is also suitable for match boxes and splint.

Albizzia procera.

Karintakara.

Fam: Leguminosæ.

This is a large tree which grows up to a height of seventy feet and a diameter of two feet. The heart-wood is dark brown in colour and is even-grained and durable. It is

used for crushers, rice pounders, cart wheels, agricultural implements, furniture and buildings. The wood yields fine charcoal. One cubic foot of seasoned wood weighs about, 45 lbs.

Other trees which deserve mention are:-

Albizzia lebbeck.

Vāha.

A. odoratissima.

Pulivāha.

A. marginata.

Potravāha.

A. amara.

Vārāchi.

Calliandra cynometroides.

These yield wood which could be used for various purposes. This last mentioned tree is found in deciduous forests at low elevations. It helps to fix nitrogen in the soil and is planted for that purpose in the tea-estates.

Polyalthia fragrans.

Nedunār.

P. longifolia.

Arana.

The former grows largely in Malayattūr and throughout the evergreen forests of Travancore. Its fibre is very valuable. Its wood is used for the masts of native crafts and is suitable for match-box and splint. Arana grows in the low country and is planted in gardens and avenues. Its wood is used for making drums and carriage shafts. The inner bark yields a fibre.

Calophyllum inophyllum.

· Punna—Alexandrian laurel.

It grows throughout the country. The seeds of this tree yield an oil which is used for burning and is called "domba" in Europe.

Calophyllum tomentosum.

Kāttu Punna.

It grows throughout the country up to an elevation of 5,000 feet above sea level. The seeds yield an oil and the wood is suitable for paper-pulp.

Poeciloneuron pauciflorum.

Pūthamkolli or Pūthāngkolli or Puli Vayila.

P. indicum.

Vayila.

These are two large evergreen trees which yield excellent wood for building and other purposes. The former grows largely in North Travancore up to an elevation of 3,000 feet above sea level and the latter at Parappār, Kuļathūpuļa and South Travancore up to an elevation of 3,000 feet above sea level.

There are several useful palms in our country. The coconut palm is cultivated in large 'topes' or groves along the coast. This is cultivated mainly for its nuts.

Caryota Urens.

Chundappana-The Kitul Palm.

This is a lofty palm which is very much cultivated for the toddy obtained from it. This is also seen scattered throughout the evergreen forests up to an elevation of 3,000 feet. The outer wood of this palm is strong and durable and is therefore used for house-building, water conduits, fencing and agricultural implements. The fibre from the sheathing perioles is made into fishing lines. The leaves yield the "Kitul" fibre which is used for making brushes and brooms. From the soft pith of the stem a starchy edible material resembling sago is prepared. A moderate-sized tree is known to yield about 20 lbs. of flour. The sweet toddy obtained from this palm is sometimes boiled and a coarse sugar is prepared from it.

Arenga wightii.

The wild coconut.

This tree which supplies toddy to the hill-men is an erect palm with a short stout trunk reaching up to about twenty five feet in height. It is generally found in moist ravines and evergreen forests. It generally grows in South Travancore. The fibre at the base of the petiole is valuable for cordage.

Bentinckia Codappana.

Kanthakamugu.

This is an endemic species found in the hills of South Travancore up to an elevation of 6,000 feet. The terminal bud is edible and may be eaten raw or cooked.

Pinanga Dicksonii.

Kāna Kamugu.

This is another member of the palm family which occurs gregariously in the evergreen forests. The nut of this tree is used by the hill-men as a substitute for arecanut.

Areca Catechu.

Kamugu or Adakkāmaram.

This is a tall erect palm the slender annulate stem of which reaches to a height of about eighty feet and a diameter of nine inches. It is believed to be a native of the Sunda Islands and China. It is now extensively cultivated in all the wet parts of the country up to an elevation of about 3,000 feet. The wood is used for rough building, scaffolding piles and furniture. The nut is used for chewing with betel and lime. It is aromatic and stimulant and is a valuable nervine tonic. It stops bleeding and is a useful vermifuge for dogs. Catechu is prepared by boiling the nuts.

Borassus flabellifer. Karumpana. This is another useful palm which is cultivated in many parts of Travancore, especially in the south. The strong outer wood is used for rafters. The hollowed stems are used as water conduits, while the leaves are used for thatching houses and for making fans, hat's, mats and baskets. A sweet toddy is obtained from the tender inflorescence, which is either drunk or is converted into jaggery. Arrack is also prepared from the fermented toddy. The petioles of the leaves and the mid-ribs yield fibre which is used for making brushes.

Corypha umbraculifera. Kodappana.

It is cultivated in North Travancore where the leaves are used as thatching material for houses and for making fans, mats and umbrellas as well as for writing. The tree grows up to a height of about sixty to eighty feet and a diameter of two to three feet. A sago-like starch obtained from the pith is nutritious and is used as food by the poorer classes. The horny seeds are used in the manufacture of buttons.

Although the flora of Travancore presents a great variety cycads are few.

Cycas circinalis. Kalanga, Kananga, or Intha. The only representative of the family "Cycadacea" which is found indigenous in Travancore. This is a small tree which very much resembles the tree ferns. The cylindrical trunks are sometimes forked and are covered with the woody bases of petioles. The tree is very commonly found in deciduous forests from the sealevel to 3,500 feet. The seeds yield a valuable flour on which the hill tribes subsist. The stem yields a clear gum and the scales of the cone a most useful narcotic.

Ficus bengalensis.

Pērāl or Alamaram.

Fam: Moraceæ.

This is a large shady tree with branches spreading thick in all directions. The branches send down numerous aerial roots which on reaching the ground

Avenue Trees. form a natural support. Several of these extending and increasing from year to year form a vast assemblage of pillar-like stems over a considerable area round the original trunk. The Pērāl grows wild but is also planted for avenue trees. It is of rapid growth, and grows best from cuttings, six or seven feet long. It is found growing wild in the moist and deciduous forests from sea-level to 4,000 feet. The wood is light, coarse-grained and brittle, and lasts well under water. The wood of the aerial root is used for cart-yokes, shafts and shoulder poles.

Ficus religiosa.

Arasumaram or Arayal—The peepul.

Fam: Moracea.

This is a large tree which is often planted in avenues. Trees of great age are known to occur in several parts of the country though not in high altitudes. The leaves, bark, fruits and tender shoot are used in medicine. The tree is also planted near temples and regarded as sacred by Hindus and Buddhists. The wood is light and perishable but can be used for fuel, charcoal, etc. Packing cases are sometimes made of it.

Artocarpus integer.

Plavu or Plamaram-The Jack Tree.

Fam: Moraceæ.

This is a very large tree famous for its delicious fruits and for the valuable timber which it yields.

Ficus Religiosa. (Arayal)

Artocarpus hirsuta.

* Anjili or Ayani.

Fam: Moracea.

Eugenia Jambolana.

Naval or Njāra.

Fam: Myrtaceæ.

This is a large tree which grows to a height of about eighty feet and gives good shade. The timber is good as it is fairly durable and is not touched by white ants.

Thespesia Populnea.

Pūvarasu or Chilanthi.—The Portia tree.

Fam: Malvacea.

This useful avenue tree gives a very strong, hard and durable timber which resembles Mahogany and takes good polish. The tree grows to a height of about forty feet.

Tamarindus indica.

Pulimaram-The Tamarind.

Fam: Leguminosa

Lāgerstroemia Flos-Regina.

Nīr Maruthu.

Fam: Lythracea.

Calophyllum inophyllum.

Punna—The Laurel tree.

Fam: Guttifera.

This is a moderate-sized evergreen tree which is sometimes planted on the sides of roads. The flowers are fragrant.

^{*} For detailed description of the following trees see portion on 'Timber Trees'.

Pongamia glabra.

Pungu-Indian beech.

Fam: Leguminosa.

This grows to a height of about sixty feet and is often planted along road-sides. 'The seeds, leaves, oil and bark are used in the preparation of medicines.

Albizzia Lebbeck.

Vāha.

Fam: Leguminosa.

This tree grows up to a height of about sixty feet. It is generally planted along road-sides.

Poinciana elata.

Vārāchi.

Fam: Leguminosa.

This is a medium-sized tree which grows up to a height of about forty feet. The leaves possess medicinal properties but are mainly used as manure for paddy. The root is applied as medicine in cases of scorpion sting.

Poinciana regia.

Gold Mohur tree.

Fam: Leguminosa.

This is a gorgeous tree bearing large panicles of bright, scarlet flowers. It grows up to a height of about sixty feet.

Pithecolobium saman.

The Rain tree—Urakkamthungimaram.

Fam: Leguminosæ.

This tree which is a native of South America was introduced into Travancore in comparatively recent times. It is grown as an avenue tree.

Pithecolobium dulce.

Korukkapuli. - Fam: Leguminosæ.

This is a small, fast-growing, thorny tree, often planted in avenues. When planted close and kept cut down, it makes an impassable hedge. The pods are edible.

Polyalthia longifolia.

Arana.

Fam: Anonacew.

This is a tall evergreen tree which grows to a height of about fifty feet. It is planted as an avenue tree. The inner bark yields a fibre. The fruit is sometimes eaten.

Azadirachta indica.

Vēppu-Neem tree or Margosa tree.

Fam: Meliacew.

A large glabrous evergreen tree which grows to a height of about forty feet. It is planted along road-sides in the drier parts of the country. The bark, leaves and oil are useful in the preparation of medicines.

Anacardium Occidentale.

Parankimāvu—The Cashewnut tree.

Fam: Anacardiacew.

This is a much-branched tree which grows to a height of about thirty feet. It is a native of America and was introduced into Malabar by the Portuguese somewhere about 1550 A. D. The wood is used for making packing cases. This tree is sometimes planted as an avenue tree.

Casuarina equisetifolia.

Kāttādi, Chaukumaram—The Casuarina.

Fam: Casuarinaccie.

This is a tall straight-stemmed tree. The ends of branches are thickly set with numerous long slender branchlets, which are mostly deciduous and fulfil the function of leaves. The tree grows to a height of about one hundred feet. It is planted in avenues in many places.

The wood is used for fuel and is sometimes employed for beams and rafters. The casuarina was introduced into Travancore in comparatively recent times.

Grevillea robusta.

Silver Oak.

Fam: Proteacea.

This is an exotic tree of moderate height usually planted in avenues. The wood is useful for making furniture.

Vateria indica.

Payin-Indian copal-tree.

Fam: Dipterocarpacea.

This is a large evergreen tree which grows to a height of about one hundred feet. This is generally planted in avenues. Its flowers are fragrant. The timber is not strong. It is, however, used for making tea chests, etc. The tree yields a gum-resin known as white-dammer or Indiancopal. The seeds yield a vegetable butter called "Pineytallow."

The most important species of hedge plants met with in Travancore are:--

The Pandanus species.

Kaitha.

Fam: Pandanaceae.

These are shrubs with linear sessile leaves with sheathing base and spinous edges. The mid-rib of the leaf is also armed with spines. Kaitha therefore forms an effective hedge. It grows well in loose sandy soils, especially in the coastal regions.

The leaves are extensively used in the manufacture of baskets, mats, etc. Keora oil is distilled from the fragrant bracts of this plant. The floral leaves are worn on the hair by women.

Opuntia Dillenti.

Pathimullu-The Prickly-pear.

Fam: Cactaceæ.

This forms an excellent hedge-plant making the hedge almost impenetrable.

Anana's comosus.

Pruthichakkai or Kaithachakkai or Anasipalam.

The Pine-apple plant.

Fam: Bromeliaceæ.

In several places the pine-apple plant is used also as a hedge-plant. This is an additional source of income to the cultivator inasmuch as it gives him sufficient strong and useful fibre and delicious fruits.

Agave americana.

Sīmakattāla.

Fam: Amaryllidaceæ.

These are generally propagated from suckers. These plants form a fine hedge when they get successfully rooted in the soil.

Agave sisalana.

Āna-kattāla.

This is closely related to A. Americana.

Euphorbia antiquorum.

Chathura kalli.

Fam: Euphorbiacea.

This grows up to a height of twenty five feet. This is commonly cultivated as a hedge-plant in the southern taluks.

Euphorbia nivulia.

Elakkalli.

Fam: Euphorbiacea.

This is another hedge-plant raised from cuttings.

Euphorbia tirucalli.

Thirukalli.

Fam: Euphorbiaceae.

This is a large shrub which is commonly used as a hedge-plant.

Jatropha curcas.

Kāttāvaņakku or Kadalāvaņakku.

Fam: Euphorbiaceae.

This is a shrub which is used as a hedge-plant almost throughout the State. The seeds give a medicinal oil. The juice is also medicinal.

Pithecolobium dulce.

Korukka puļi.

This forms an impassable hedge when planted close.

Casuarina equisetifolia.

Sāmprāni or Kāttādy.

Fam: Casuarinacea.

This is planted close and cut back to form a hedge.

Saccharum arundinaceum.

Pekkarumbu.

Fam: Graminae.

When planted close this forms a good hedge.

Sesbania grandiflora.

Agathi.

Fam: Leyuminosa.

In some places this is grown as a hedge-plant.

Sesbania aegyptiaca.

Chittagathi.

Is also used as a hedge-plant.

In some places the seeds of the palmyra palm are sown in rows to mark the boundaries of large 'topes'. Growing very slowly, they form an impenetrable hedge for a good many years. Karuvēlam (Acacia arabica) and Arvēlam (Acacia farnesiana) are also serviceable as hedge-plants.

Samadera indica.

Karinjotta.

This is used as a hedge-plant in several of the taluks situated near the coast, such as, Ampalapula, Sherthala and Vaikom. Adalōdakam (Adathoda vassica) is also cultivated as a hedge-plant. Xanthophyllum flavesens is another plant which is commonly cultivated as a hedge-plant.

Shade trees.

The important shade-trees of Travancore are:-

1. Sesbania grandiflora.

Agathi.

S. aegyptiaca.

Chittagathi.

These are commonly planted as supports and shadetrees in betel-vine gardens.

Erythrina indica.

Mullumurukku.

This is planted as a support for pepper vines. Recently, however, *E. Lithosperms*, introduced from the Malaya Archipelago is also used as a shade tree in the coffee and tea plantations.

Trema orientalis.

Ami.

This is a small tree of very rapid growth. It is used as a shade tree in the coffee plantations.

Albizzia stipulata.

Pottavāga.

A. odoratissima.

Nellivāga.

These are sometimes grown as shade trees in coffee and tea estates.

Cliricidia sepium, Bauhinia-acuminata are also commonly used as shade-trees, while Acacia arabia, Acacia leucophloea, are species which, though often planted as shade-trees, are not very popular.

Vegetables and other food products.

The specific identification of the several cultivated vegetables is difficult. It is all the more so because of the multiplicity of vernacular names by which these are known in different parts of the State. A description of the most important vegetables and food products will be attempted in the following paragraphs.

1. Leguminous plants.

1. Doliches lablab.

Mocchakkotta.

This is a climbing plant which is largely cultivated in the gardens. The seeds vary in colour from dark-red to black or cream-white. The seeds are cooked and eaten.

2. Dolichos biflorus.

Muthira or Kāṇam-The Horse gram.

Several varieties of this plant are cultivated. The variety with mottled seeds and the one with light-red colour are very common.

This is a semi-erect annual which grows up to two or three feet. It is specially suited to dry regions and is grown extensively. It is used as food for man, horse and cattle. It is also a good green-manure crop,

3. Vigna catiang.

Karamēni or Köttappayaru.

This is a common cultivated pulse with prominent long rods. The raw pods and seeds are cooked and eaten.

4. Cyamopsis psoralioides.

Kothavara—Cluster beans.

This is a small bushy plant which is generally cultivated in the gardens. The small pods which are about three inches long are produced in clusters; hence the name cluster beans. They are very popular as a vegetable in the preparation of curries. The plant is not grown on a field scale in Travancore.

5. Phaseolus mungo

Cherupayar or Pāśippayar—Green gram.

This is a small erect annual. It grows up to a height of about 16 inches. The whole plant is hairy. It is cultivated in the drier regions of Travancore. The seed is regarded as a wholesome food.

6. Phaseolus mungo.

Ulunnu-Black gram.

The Black gram differs from the green gram in having a longer stem and a trailing habit. The hairs in this plant are very prominent. The seeds are darkbrown in colour and are highly esteemed as an article of diet.

7. Cajanus indicus.

Thuvarai—Red gram.

This is a shrub which grows up to a height of about six feet. It may be planted alone in rows or mixed with other crops. The seeds form a valuable and important article of human food.

8. Psophocarpus tetragonolobus.

Chathurappayaru—Winged beans.

This is a climbing shrub with large pale-blue flowers which bear peculiar four-cornered pods; hence the name chathurappayar. The pods possess four leafy fringes running along their length at each of the four corners. The green pods are cooked and eaten.

9. Canavalia ensiformis.

Vāļaringa-Sword bean.

This is a robust perennial climber bearing large, flat, sword-shaped pods. The tender pods are cooked and eaten.

10. Arachis hypogen.

Nilakkadalai-Ground nut.

This is cultivated in the dry tracts. The area under this crop is rapidly increasing. This may be raised as a rainfed crop or as an irrigated one either alone or mixed. The seeds contain as much as 50 per cent. of oil.

Phascolus multiflorus (Pathinettumanian), P. coccineus (Perumpayar), and P. vulgaris (Kidney bean) are also cultivated in the kitchen gardens.

The Soya bean (Glycine hispida) is an erect annual which is very much valued for its nourishing seeds.

There are several varieties distinguished according to the colour of the seed. According to competent authorities, the yellow-seeded variety is the best suited for the tropics.

The soya bean contains little or no starch. It contains about 40 per cent. of proteids and 20 per cent. of fat. It is also rich in minerals.

11. Sesbania grandiflora.

Agathi.

This is a small tree which grows up to a height of about twenty feet. The flowers, tender leaves and fruits

are used for curries. The bark, leaves and flowers are used in medicine.

II. Cucurbitaceous plants.

Most of the plants of this group thrive well in a dry climate under irrigation, but they may be grown anywhere in rich soil with abundant water at the root.

1. Benincasa cerifera.

Chāmba Pūśinikka, Kumbalanga or Thadiyankā. This is a stout annual climber which may be seen growing over the roofs of thatched houses and on trees. It may also be seen trailing on the ground. The plant yields large, handsome, oval-shaped gourds which are used for curries. Some varieties are used in medicine, particularly that known Nei Kumbalanga.

2. Cucumis sativus.

Vellari.

This is cultivated in gardens throughout the State. It yields a thick cylindrical fruit which is used for curries and salads.

3. Cucurbita maxima.

Mathan or Pūśinikkai.

The plant is an annual and is generally allowed to trail on the ground. The fruit grows to a large size. It is globular and bluntly ribbed. It is a popular vegetable.

4. Trichosanthes anguina.

Padavalam-Snake gourd.

This is a thick-growing climbing plant which bears long, cylindrical fruits which may be green or greenish-white in colour. The unripe fruits are sliced, cooked and eaten.

5. Lagenaria vulgaris.

Churakkāi—The Bottle gourd.

This is a climbing annual which is grown either on the ground or allowed to trail on fences and trees. The fruits are long and variously shaped. When unripe they are cooked and used as a vegetable. The shell of the ripe fruit is hard and durable and is therefore commonly used as a vessel for carrying water.

6. Luffa acutangula. Pichankā.

This is a climbing annual plant which thrives best when trailed on to supports. The fruits are long and possess several longitudinal, angular ridges. They are used for curries.

7. Momordica charantia.

Pāval—Bitter gourd.

This is a slender vine which is generally allowed to trail on the ground or on supports. It grows very well during the rainy season. All parts of the plant possess medicinal qualities. The fruits are edible.

M. dioica, M. cymbalaria and M. cochin-chinensis are other species of *Momordica* the fruits of which are used in the preparation of curries.

8. Citrullus vulgaris.

Thanni Mathan-The water-melon.

This is an annual trailing plant which is cultivated in the gardens for its fruits. The juice of the fruit with cumin seeds and sugar is used as cool drink in summer. The fruit is also used in cooking.

Zehneria umbellata.

Njerinjanpuli.

Melothira heterophylla, is a herbaceous climbing plant the root and fruits of which are cooked and eaten. Köval,

Cephalandra indica is another climbing annual which bears edible fruits.

III. Tuberous plants.

1. Ipomoea batatas.

Śarkaravalli or Mathurakilangu.

This is a creeping plant which produces sweet, succulent, tuberous roots which form a nutritious article of food.

2. Coleus parviflorus.

Kūrka or Chīvakiļangu.

This is another plant which is generally cultivated in Travancore for its edible root tubers. It is usually propagated by cuttings.

3. Amorphophallus campanulatus.

Chēna—The Elephant-foot yam.

This is an important root-crop which is generally cultivated in the hilly regions and in the plains where it has to be heavily manured. It is not generally cultivated in the drier regions.

4. Colocasia antiquorum.

Chēmpu.

This is a tuberous plant which is generally cultivated in moist grounds. All the parts of the plant are cooked and eaten. Some of the varieties contain an acrid principle.

Kaṇṇan, Thāmarakkaṇṇan, Vella Chēmpu, and Karkadaga Chēmpu are some of the important cultivated varieties which are named according to the distinctive morphological characters which they possess.

Vellachēmpu (pathosma alba) and Pālchēmpu (X. violacea) are also cultivated the in gardens and are used as vegetables,

5. Typhonium trilobatum.

Karana Kilangu.

This plant yields a tuber which is acrid. This is sometimes boiled with tamarind water to remove its acridity. It is thus made good for curries.

6. Dioscorea bulbiferia.

Kāchil.

Peruvalli kāchil (D. alata). These are the two very common forms of yam cultivated in this country.

7. Dioscorea acullote.

Cheruvalli kilangu.

This also produces edible root tubers which are hard to digest.

Nūran (Dioscorea pentapylla), Kānji (D. oppositigolia), and (D. purpurea) yield edible tubers. There are a few others which are either acrid or are possessed of inferior starch.

Tacca pinnatifida, (Chainay) is a member of the family Taccaceae, the roots of which are eaten. They are also possessed of medicinal properties.

8. Manihot utilissima.

Marachīni or Kappachīni-The Tapioca.

This is a shruby plant which grows to a height of about six to eight ft. Two distinct kinds of this plant are recognised.

- 1. The Bitter variety, which is characterised by the presence of a greater percentage of prussic acid contents.
- 2. The sweet variety which contains a smaller percentage of the poisonous principle.

The poor people of the State depend mainly upon the tuberous roots obtained from this plant. The tapioca flour, tapioca-pearls and dried tapioca chips are the several forms in which the tubers are put in the market. There are several varieties of this plant under cultivation.

The varieties generally met with are (a) Aviyan (Kōlipūvan, Valamuttan or Rottichīni, the mature stems of which are light brown in colour, while the tender stems are greenish with a light yellow tinge. Petioles purple with a colourless band near the base. Tender leaves deep purple. Stipules coloured and bifurcated. Height about seven feet. Stem distinctly zigzag. Tuber inner peel distinctly purple. The tuber is fine, boils well and is very soft, sweet and mealy.

- (b) Panchasāraveļļa. The plant grows to a height of about seven to eight feet. Mature stem light brown. Tender stem green with light yellow tinge and with rectangular cross section. Petioles green, with purplish tinge near the base. Place of insertion of leaves on the stem and vein colourless. Stipule slightly purple. Tubers coloured brown;
- (c) Sundarivella. Height 70". Mature stem brown, tender stem green with yellow tinge with distinctly branching habit. Petioles purple, place of insertion on stem dorsally colourless, veins light coloured and margin of stipules coloured. Tubers greyish white.
- (d) Ilavan. Height 74". Mature stem dark-brown and stout; tender stem green; petioles stout and dark purple in colour with a light coloured band near place of insertion of the petioles to the blade. Leaf base deep purple at the place of insertion on the stem. Veins light purple. Tender patioles light green. Stipules purple.

Tubers. Dark brown with small white stripes at intervals of half an inch.

- (e) Thuthivella. Height 46". Mature stem light brown; tender stem dark purple with a green band where it joins the blade and dark purple ventrally at the place of insertion on the stem. Stipules purple. Tubers grey.
- (f) Ennakarimaravan. Height 84". Mature stem dark brown; tender parts distinctly green; petioles purplish with a band of green at place of insertion on stem. Stipules purple. Veins coloured to a third of the whole length, Tubers distinctly brown.

- (g) Kokkiyanvella. Height 80". Mature stem brownish with light purplish tinge. Tender stem light green; petioles purplish coloured with a light band at the place of insertion on to the blade. Place of insertion on the stem deeply coloured. Stipules distinctly purple; branching tendency distinct. Tubers light purple.
- (h) Īkkikarumaravan. Height 72". Mature stem dark brown. Tender stem dark green. Stem with tendency to branch. Leaves and petioles small in size. Unifoliate leaves present where stem branches. Petioles green. Place of insertion on the stem dark green. Veins colourless. Tubers deep brown.

Kottinvella, Kalikālakkutta, Thurava vella, Karuthailavan, Thūkuvella, Kutta aviyan, Karumaravan, Chenthandan, Kappalvella, Ōlikkarumaravan, Piriyanchumala, Chillikkālan, Mankōva, Ānamaravan, Kōvilvella, Undakkaṇṇan and Njarunga are a few of the several other forms under cultivation.

Kaiyyalachady, an early-maturing variety which is found in Central Travancore, is one of recent introduction.

9. Curcuma angustifolia.

Kūva—The Arrow root.

The tubers obtained from this plant form an important article of food. The poor people collect the rhizomes and extract the starch by grating the tubers on a rough surface and then after processes of filtering, decanting and constant washing, the starchy material is extracted, dried in the sun and put in the market as the "arrow root flour".

The flour makes a cooling diet and is useful in dysentery, dysuria and gonorrhoea.

Cabbage (Brussica olearacea), Carrots (Daucus carota), Cauliflower (Brassica olearacea Botrytis), Knolkohl (Brassica caulo-rappa), Lettuce (Lactuca sativa), and Radish (Raphanus sativus) are some of the temperate vegetables cultivated on the hills. Potatoes (Solanum tuberosum) are

also cultivated in some of the hill stations. Tomotoes (salanum lycopersicum) are now cultivated almost all over the country.

Amaranthus is grown as a vegetable in most of the back-yard gardens. The whole plant is generally pulled out and used in the preparation of curries. "Mullan Kirai" (A. spinosus) and A. viridis, are wild growths which are collected and used in the preparation of curries. Cherukirai (A. mangostanus) is cultivated in some places and used as a vegetable.

Basella, the climbing Pasali, is commonly cultivated and used.

Venda (Hibiscus esculentus), Muringa (Morinya oleifera) and Passiflora quadrangularis are also cultivated in the kitchen gardens.

Kathari (Solanum melongena) has several varieties which differ in colour, shape, size and flavour. These are grown all over the country either alone or mixed with other vegetables. The unripe fruits are used for making curries.

Plants producing edible fruits.

Fruit growing in Travancore is carried on in a haphazard manner. It is often considered as an auxiliary means of livelihood. Since most of the fruits produced in this country do not find a ready market, the main objective of the cultivator is mostly consumption only.

Mangifere-indica.

Māmaram or Māvu-The mango tree.

Fam: Anacardiaceae.

This tree yields one of the most popular fruits in the tropics. In some places it is of considerable value as an article of food in times of scarcity. The tree grows from sea level to about 2,000 feet above which height it does not

produce fruits satisfactorily. In Travancore there are numerous varieties of mango under cultivation. The different varieties vary in point of flavour, juiciness and even in size and shape. Surangudy in South Travancore is famous for its mangoes. Those in the central and northern taluks are inferior to those produced in the south. The common varieties met with in the central and northern taluks are Mūvāndan, Kappa, Varikka, Kiļichundan, Chakkarakāchi, and Chantrakkāran. Inferior acid fruits are all collectively grouped under the common name "pulichy mānga" which is good for making pickles only. The important indigenous South Travancore varieties are:—

"Karuppukhi". This is considered to be one of the best varieties in the south.

Kallu vařikka, Kola, (Chakkařakkola and Kola) Valappu, Thyřukāchi Kařuppukatty-kāchi, Chīni-kāchi, Śarkařa-kāchi, Manja-kāchi, Kappa-kāchi, Vattukkola, Pothakāchi, Vellakkāchi, Mandenki, Pavakkāchi, Palavakkāchi, Pachařiši, Thengakkāchi, Karpūřamāvu, Sāmprāṇimāvu, Pulippukkāchi, Uřundakkāchi and Valakkāchi are some of the other important varieties.

The varieties of mangoes the pulps of which are acid to taste are sometimes collected raw and cut to pieces for drying in the sun. The dried pieces called "Adamanga" are preserved for future use. A variety called "Kāttumānga" is also recognised. The pulp of the fruits of this variety is traversed by large vessels containing an acrid sap. The presence of this acrid sap makes it unwholesome for consumption, as it leaves behind a very disagreeable and irritating sensation in the throat. The fruit is small in size.

In addition to the indigenous varieties enumerated above we now have several introduced grafts which produce superior fruits. The important among them are:—Mulgova, Bangalore, Kalapadi, Sundersha, Rumania, Pairi, (Natasala, Crepe, or Raspuri) Chittoor-hamlet, Neelum and Millagiri, while Rasberry, Peter pasand, Kadar pasand, Chittoor

and Gothayamar are also commonly seen in the gardens of private individuals.

The mango sometimes fails to set fruit on account of strong winds or rain at the time of flowering. This fact has to be borne in mind when grafts are obtained from outside.

Psidium guajava.

Koyyāpaļam, Pērakkā.

Fam: Myrtaceae

This was originally a native of tropical America, but now it is thoroughly naturalised in India and Ceylon. There are three improved varieties, namely, the Allahabad, Benares and Trinidad, all of which were introduced into Travancore in recent times. Guava is also found growing wild.

Punica granalum.

Māthalam or Māthalanga.

Fam: Punicacea.

Owing to its medicinal properties this fruit is very popular in India. The fresh root-bark is anthelmintic. The rind of the fruit is a valuable astringent. The leaves and flowers are also useful as medicine. The introduced Bangalore and Dholka varieties are now popular. The local acid variety is used in the preparation of curries and certain Ayurvēdic preparations.

Artocarpus integer.

Plavu-The Jack Tree.

Fam: Moracea.

This is a native of South India from where it was introduced into Ceylon and other places. The fruit which in some cases weighs up to about 50 lbs. is an important article of food. There are two chief varieties of the jack in Travancore.

- 1. The "Varikka". The flakey pulp surrounding the seed in this variety is firm. There are three subvarieties. They are:—
- (a) "Chemparuthi". The pulp of this variety is coloured purple (like that of shoeflower).
- (b) "Vella" the edible pulp of which is yellowishwhite.
- (c) "Then Varikka". At the hollow bottom of the pulpy matter there is a sweet honey-like secretion which flows out on pressure.
- 2. "Kūļa." This is inferior to the Varikka in sweetness. The pulp becomes very soft when ripe.

The jack fruit when ripe emits a strong smell and the quality of the fruit is determined by the intensity of the odour.

The stout roots of the jack tree form fit material for making musical instruments like "Vīṇa" and "Tambūr."

Artocarpus communis.

Simaplavu—Bread fruit tree.

Fam: Moracea.

This is a quick-growing, handsome tree which attains a height of forty to sixty feet. There are two recognised varieties of this tree of which the seeded variety is considered to be very much inferior to the seedless one.

Artocarpus hirsuta.

Ayani or Anjily.

Fam: Moraceæ.

The common English name for this tree is 'Jungle-Jack'. It is planted extensively in the plains. The fruit is edible and is used by the poor folk. The seeds yield an oil which is used for various purposes. In some places the seeds are fried and eaten.

Cariota papaya.

Pappāļi or Omakka-Papaya.

Fam: Caricaceæ.

The ripe fruit of the papaya is very popular as dessert. When green the fruit is used as a vegetable. The white latex obtained by bruicing the unripe fruit is used as a vegetable. The tree is generally diœcious but there are certain strains which are claimed to be monœcious. All the varieties of papayas carry the enzyme "papain". The thicker skinned type is believed to yield a greater quantity of pepsin.

Garcinia Manyostana.

Mangosteen-Mangustan.

Fam: Guttiferae.

This is a moderate-sized tree which is a native of Malaya. It is now cultivated in several parts of Travancore. A hot moist climate with a deep, rich, well-drained soil is what is wanted for the cultivation of the plant. It is generally grown from seed. Attempts to graft on other Garcinia species are now being made. It is one of the most delicious fruits grown in the tropics.

Garcinia Cambogia.

Kodappuly or Pinaru.

Fam: Guttiferac.

This is a moderate-sized handsome tree which grows in moist situations. The succulent shell of the ripe fruits is cut and dried in the sun and preserved to be used as a substitute for tamarind in curries. The gum obtained from the tree makes a good varnish. The rind of the fruit and the rootbark are considered to be medicinal.

Musa sapientum.

Vāļa.

Fam: Musaceae.

This is a quick-growing plant which attains to a height of about ten to twenty feet. It is characterised by its peculiar herbaceous stem which is made up of closely packed, succulent, leaf-sheaths. It yields one of the very delicious of tropical fruits, which is highly nutritious and easily digested. The unripe fruit is astringent, while the ripe fruit is laxative. The roots, rhizomes and flowers are also medicinal. Several varieties of this plant are found in Travancore.

Thevankadaļi or Matti. This is found generally near the hills in the Thovala taluk. But it also grows in almost all parts of South Travancore.

Pēyan. Though it is common in several places in the Tinnevelley District, in Travancore it is seen only at Ārāmboļy in Thōvāla taluk.

Monthan. This is cultivated throughout the State.

Chingan. This is a very common variety found throughout Travancore.

Nentran or Ethan. This is the most popular of the table varieties grown in Malabar but is almost unknown in other places in South India. It does not thrive well in Nanjanad. It requires heavy manuring. To bring down the cost of cultivation such inter-crops as yam, elephant's foot, etc., are also raised.

The peal of the fingers of this variety is moderately thick and the pulp firm. The fruit is highly nutritious. The raw mature fruit cut into slices, sun-dried, and powdered and boiled into gruel forms valuable food for infants. The unripe fruits cut into slices are also fried and used as "uppēri". They are sometimes cut into large pieces and fried without salt and then sugar-coated. This preparation is called "Śarkarapuratti". The practice of making jam with the ripe fruits is prevalent in most of the banana growing areas.

'Banana-figs' popularly known as "Varattuvalakka" are prepared by drying the ripe-fruits in the sun. These



Plantain.

are then preserved in alternate layers of figs and sugar in which condition they keep for a long time. The ripe fruit and the jam are used in the preparation of several sweetmeats.

A sort of banana-cider is prepared by keeping the minced pulp of one ripe fruit in about 24 ozs. of water in a closed vessel for about a week. This forms a very refreshing and exhilarating drink for the summer.

The underground stem of this variety is generally used as an article of food, while the flowers are used for making curries. The flowerstalk which is called "Vālathandu or Vālappindi" is also used in the preparation of curries. In cases of obstructions in the abdominal viscera the preparations from the vālathandu or "Vālapindy" and the underground stem are highly useful.

"Padala-mūngil" and "Ottamūngil" are varieties found in the hills. The bunches in these varieties produce only one hand consisting of a few fingers in the "Padalamūngil" and one finger in the "Ottamūngil." It is believed that "Ottamūngil" is a manipulated product of the "Padalamūngil." These are interesting curios of the plantain world.

"Pūvan." Another important variety is Pūvan which is otherwise known as "Thuluvan." This is a very popular table variety. It is grown all over the State.

"Kadali." This is the variety which is generally used for making offerings to gods. As it is very difficult to successfully raise this variety, the fruits are rare and are consequently sold at exhorbitant prices.

"Pāļayanthōdan." This is the commonest plantain throughout the State. When planted in rich alluvial soils, it produces large-sized bunches with well-formed fingers.

Kannan or Pūnkadaļi." This variety also is cultivated throughout Travancore. The tendency to form twin-fingers is common in this variety.

"Kūmpillā Kannan." This variety resembles Kannan but is distinguished from the latter by the absence of the

infertile tip of the inflorescence when the fruits are fully formed and the flower bracts have fallen off.

"Irumudikannan." This variety also resembles Kannan in the consistency of its pulp and other morphological characters but is distinguished by the presence of infertile flowers in the midst of the bunch, giving it the appearance of a "double bunch."

"Njāli-Pūvan or Nāṇipūvan." This variety resembles the pūvan or thuļuvan in almost all its morphological bearings, the only difference being that in aṇṇan the fingers are slender. The pulp is firm, mealy and delicious. This is probably a sub-variety of pūvan or thuļuvan.

"Kappa palam." In some places this is known as "Malanpūvan." The peel is thick and slightly angled. The pulp is very soft and is possessed of a peculiar aromatic after-taste. Two sub-varieties are recognised.

- (a) The variety with dark-purple peel which is known as chovvāļa paļam, and
 - (b) the variety with yellow peel.

"Karinkadali." As the name suggests, the fruits and the exposed vegetative parts are dark coloured. The fruits of this variety are used as vegetable in the preparation of curries for invalids.

"Kuli vāla." (Mauritius plantain). This is a dwarf variety. In some places this is also known as "paccha vālai."

Músa superba.

"Kallu vāla." Wild plantain.

Kallu vala or mala vala grows in the jungles. This is cultivated as an ornamental plant. The leaves are used as platters for serving food. The leaf sheaths yield a good fibre.

Pine-apple, Kaitha-chakka, Piruthichakka,

Fam: Bromeliaceæ,

Ananas comosus.

The pine-apple is a perennial acaulescent plant with long narrow spiny leaves. It is a native of tropical America but was introduced into all warm parts of the globe. In Travancore it is mostly grown as a hedge-plant. In certain places it is also cultivated as a garden crop. There are four distinct varieties now under cultivation.

- 1. Columbukka (Kewpine). The leaves of this variety are spineless. The fruits are large (weighing from four to ten pounds), sweet and juicy. This is one of the best of the introduced varieties.
- 2. Śīma (Mauritius). The fruits of this variety are small and are of a yellow colour. The leaves are spiny. The fruits weigh from about two to four pounds.
- 3. Nättuchakka or the local variety produces small fruits more or less acid to taste. The fruits are used in the preparation of medicines for children.
 - 4. Australian, the pulp of which is very sweet.

Anona reticulata.

Atha-Panchi-Custard Apple.

Fam. Anonacco.

This is a small shrub which is a native of tropical America. It is now found in most of the gardens in Central and South Travancore. It grows to a maximum height of about fifteen feet. It is extremely adaptable but grows well in rather dry and hot situations. It prefers a well-drained light soil.

Achras sabota.

Śima illuppai—Chikku—the Sapodilla plum.

Fam: Sapotaceae.

This is a small elegant tree which grows to a height of about twenty five to thirty feet. It is an introduced plant in Travancore.

The round and oblong fruit when perfectly ripe is very delicious. Large, black, shining seeds are embedded

in the seed-pulp. In Travancore this plant is grafted on "illuppai" seedlings.

A white latex obtained from the tree by making incisions in the bark forms the basis of the chewing gum of commerce. For making chewing gum the latex is scented and flavoured with mint and other ingredients.

Vitis vinifer.

Drāksha or Munthiringa—Grapes.

Fam: Vitaceac.

Grapes of tolerably good quality are grown in the drier tracts of the State. In South Travancore it is largely cultivated. The best variety available in the south is the "Black Prince."

Flacourtia inermis.

Lovi-Lovi.

Fam: Flacourtiaceæ.

This is a small tree which grows to about thirty feet in height. The plant bears bright red berries which are exceedingly sour but which could be used in the preparation of jelly and preserves. This is a native of Malaya but is now commonly seen in various parts of India including Travancore. In some places this is used as a hedge-plant.

Durio zibethinus.

Fam: Bombacaceæ,

The Durian is a native of the Malaya Archipelago. The ripe fruit possesses an intensely offensive odour. People who acquire a taste for it prize it highly. The fruit weighs from five to seven pounds. It is a recent introduction in Travancore.

Anacardium occidentale.

Parankimāvu—Cashewnut.

Fam ; Anacardiaceae.

This tree which grows to a height of about thirty to forty feet is now cultivated extensively for its fruit. It grows well in waste lands which are useless for the cultivation of other plants. It is considered to be a native of the West Indies but is now thoroughly naturalised in Travancore.

The so called fruit consists of two parts.

- (i) The large swollen flower-stalk called the cashew apple. This is juicy and is possessed of a peculiar acid taste. It is largely eaten by the poor folk. When eaten some of the varieties leave behind an irritation in the throat. A strong spirit may be distilled from the fleshy stalk.
- (ii) The small kidney-shaped nut. The edible kernel is roasted and separated from the pericarp and is much relished for dessert. It is exported to Europe and America where it is used for confectionary and flavouring purposes. The tar from the pericarp is an economic product. It is supposed to be a preventive against the attack of whiteants.

The tree yields a gum which is considered to be poisonous to insects. All parts of the fruit are used in medicine.

Aegle marmelos.

Kūvalam-The Bael tree.

Fam: Rutacea.

This is a small spiny tree, though apparently growing wild. It is cultivated in the private gardens of Hindus. The doughy aromatic pulp of the fruit with the glutinous substance is relished by some people. The pulp is highly medicinal and is used in the preparation of sherbet.

Feronia limonia.

Vlanka-Elephant apple or wood-apple.

Fam: Rutacea.

This tree grows to a height of about forty to fifty feet. The fruits are round and possess a whitish surface. The brownish mealy pulp inside the hard, woody shell is eaten by the poor class of people. With honey it is a delicious medicinal diet. The pulp of the raw fruit is used in the preparation of preserves and pickles.

Zizyphus Jujuba.

Elantha—The Jujuba tree.

Fam: Rhamaceæ.

This is a small spreading tree armed with recurved thorns. The "jujuba plum" is the fruit of the cultivated varieties of Elantha. The varieties found locally produce inferior fruits. With a little care the fruit could be improved as it has been done in China. When cooked with sugar the fruits afford a very nice dish.

Diospyros Kaki.

Kaki fruit-Date plum or Persimmon.

Fam: Ebenacea.

This is an important fruit tree found in the sub-tropical regions. The fruits have an agreeable flavour. This is a recent introduction in the country.

Citrus aurantiifolia.

Cherunāranga.—The lime fruit.

Fam: Rutacea.

From the acid fruits of this tree citric acid is obtained. The fruit possesses medicinal properties.

Citrus maxima. (C. decumana is a synonym).

Bamblimās.

Fam: Rutaceæ.

An important large-sized edible fruit is obtained from this tree. It is commonly cultivated in moist low country where it produces large fruits.

Citrus medica.

Vadukappuly naranga.

This is cultivated for its acid fruits which are used in the preparation of curries and pickles.

Citrus sinensis. Sweet-orange.

Madhuranāranga.

This is planted in some of the gardens in the plains and in the hills. The fruits are not very sweet.

Passiflora quadrangularis.

Śīma kumbalam or Śīma chorakkāi.

Fam: Passifloracea.

This is a strong climber with square stems and large oval leaves. It is believed to be a native of tropical America. The greenish-yellow fruit contains a mass of sweet acid pulp which is edible. The unripe fruit is used for making curries.

Nephelium (Lappaceum?)

Rambutan.

Fam: Sapindaceæ.

This is a large, handsome, spreading tree believed to be a native of Malaya. The tree produces a large number of attractively coloured fruits the edible pulpy aril of which is eaten. It is generally raised from seeds but the best varieties are those raised by grafting. The plant is gradually becoming popular in Travancore.

Eugenia cumini.

Njāra Palam. Nāgappalam.

Fam: Myrtaceæ.

This is a large tree found growing throughout Travancore. The fruit is generally easen. It is also used in tarts and puddings. The fruits and other parts of the plant are used in medicine.

Eugenia jambos.

Rose-apple-Paninir jamba.

Fam: Myrtacea.

The fruit is agreeably sweetish-acid to taste. It possesses a peculiar aroma.

Averrhoa bilimbi and Averrhoa carambola.

Fam: Oxalidacea.

These are known by the names of vilimbi and pulinchi respectively. These are two moderate-sized shrubs which yield distinctly acid fruits which are used in preparing curries and pickles. The fruit, the leaves and the roots are all used in medicine.

Ficus carica.

Atthippalam.

Fam: Moracea.

This is a small spreading deciduous tree which is a native of the Mediterranean region. Stray plants of this are seen in private gardens in South Travancore.

The Egyptian variety is the most popular.

Trapa Bispinosa.

Water-Chest-nut-Nīrmulli.

Fam: ()nagracece.

In Travancore it occurs as a floating herb in most of the neglected tanks, though it is cultivated in stagnant water in other provinces for the sake of its albuminous seeds. The seeds are believed to possess medicinal qualities.

Travancore possesses a large number of plants which yield fibre. The fact that some plants yield fibre was probably known even to the very early Fibrous Plants. inhabitants of the country. What Dr. F. Royle says about Indians in general will be of interest here. He says:—"If we consider how early India was civilized, how long the greater number of the useful arts have there been practised, we might safely infer that the country must long have possessed a variety of

products fitted for the several purposes to which flax and hemp are elsewhere applied.....".

The triangular stems of the Cyperaceous plants and the leaves of *Pandanus* were from very early times employed in the manufacture of mats, baskets, etc. The fibres of *Hibiscustiliaceus* (Āttuparuthy), species of *Sterculia* and *Grewia*, there are reasons to believe, were known even from very early times. It may be mentioned here that in ancient days cotton was cultivated in South Travancore and put to various industrial uses.

Fibre may be obtained from one or several of the following parts of plants.

- 1. Leaves,
- 2. Stems and branches,
- 3. Roots,
- 4. Fruits.

Leaves. Fibre in leaves seems to be the rule in most of the mono-cotyledonous plants.

Stem and branches. Stems and branches of some of the Di-cotyledonous plants also abound in fibre. The barks of the Di-cotyledonous plants are often well-defined and can therefore be easily peeled and separated from the wood.

In the case of under-shrubs and shrubs the whole plant is collected and soaked for the fibre it contains, while in the case of tall weedy shrubs or trees only the branches are used for the extraction of fibre. The fibres obtained from Attupuruthi (Hibiscustiliaceus), Muruthon (Sterculia villosa) and Thondi (S. guttata) are very strong and useful. They are therefore very well known.

The weak, trailing or twining stems of certain species are not infrequently used as towlines and coarse substitutes for ropes. Chunnampuvalli (Vides pallida), Lettsomia mysorensis, etc., afford examples of the same. The practice of preparing coarse ropes of straw, sedges, etc., also deserve mention.

Roots. The roots of some plants also yield fibre. The roots of *Butea* species and the aerial roots of *Pandanus* abound in fibre. They are used for various purposes.

Fruits. Certain parts of the fruits of some plants are known to yield useful fibre. The husk or fibrous outer covering of the coconut is separated from the nut and soaked in salt water. The fibre contained in the husk is subsequently separated by beating it with a wooden mallet. The palmyra fruits also yield a kind of fibre, but as it is brittle, it is only used for stuffing pillows.

The cotton of commerce is obtained from the fruits of the cotton plant. The localised growth of hairs of the seeds of Madar forms the "yerkumfloss" of commerce. This soft floss is in some places generally used for stuffing pillows. In Travancore, however, this useful floss is quite neglected.

The cotton stuff obtained from the fruit of the Silk Cotton tree (*Eriodendron anfractuosum*, and *Bombax malabaricum*) is mainly used for stuffing cushions and beddings. Silk cotton, as the stuff is commonly called, does not spin like cotton and hence clothing cannot be easily made of the substance.

Cultivation of plants for their fibre is almost unknown to most of the cultivators in Travancore. Recently, however, in some places certain fibrous plants are cultivated. In Shenkotta chanampu or Sun-hemp (Crotalaria juncea.) is cultivated in the fields during the time between two paddy crops. It is used for making a kind of coarse canvas, cordage and fishing nets. At Chinkārapally, Mukkād, Alwaye and other places the plant is grown for its fibre which is used in the manufacture of fishing nets and fishing lines.

Under the existing circumstances it will be found difficult to persuade the people to take up the cultivation of other fibrous plants. Kurunthōtti (Sida rhombifolia, and Karipuļi (Hibiscus sabdariffa) which are now cultivated

for other purposes may be cultivated extensively and their stems utilised for the extraction of fibre. About the fibre obtained from Kurunthōtti, Major Hanny and Dr. Roxburgh speak in highly glowing terms. About the tensile strength of the fibre, they write:—"A line only half an inch in circumference sustained, after exposure to wet and sun for 10 days, 400 lbs." The woody portion of the plant after extracting the fibre is believed to be useful for the manufacture of paper.

The same is true of Vellūrpam (Sida cordifolia.) also. This plant can be secured root, shoot and all, for the simple trouble of collecting it. It is not cultivated, but grows spontaneously and is considered a weed. The medicinal qualities of the roots are well known. The fibre obtained from Vellūrpam is soft, strong and silky. Karipuļi is now cultivated in the vegetable gardens for its edible parts. The stems afford a quantity of good, soft and strong fibre.

Ananas Comosus.

Pine Apple.

Fam: Bromeliacea.

The long fleshy leaves abound in fibre which is strong and silky and can be used for the manufacture of textile fabrics. In Travancore, the fibre is used as a substitute for sewing thread. In some places fishing lines are made of this fibre, which is known to resist the injurious action of water. The fibre is not commonly extracted because of the difficulty in effecting the same without a machine.

Plantain is one of the three most important fruit plants (Muppalangal) cultivated in the State. They are cultivated mainly for their fruits. The fibre obtained from the stem is generally brittle and is therefore woven into clothes in mixture with cotton yarn. The brittle fibre may be made use of in the manufacture of twine and rough cordage.

The fibres of Thondi and Muruthon are now used in the manufacture of fancy hats. The seat of this cottage industry is Quilon.

The Kaiven fibre obtained from Valampirit (Helicteres isora.) is made use of by the Ettāliës of Erumēly and Kānjirapally for the manufacture of nepputtu (sacks of a peculiar type to carry paddy) and chelavu or uruppa. The fibre may be used for making canvas. At Kottārakkara there are a few families engaged in the manufacture of canvas from this fibre. A sort of thick, rough canvas is made of the fibre of sun hemp at Shenkotta.

Till we take up the cultivation of fibrous plants—especially of the annuals—in all earnestness, we shall confine our attention to the fibrous woody shrubs and trees which grow in the forests and plains. These plants, most of them, have an advantage over the annuals like Sida, Urena, etc., in that they are not to be raised annually and that they give out branches which can be pollarded. The branches thus obtained may be retted for fibre while the leaves may be used as manure. Fibrous plants like Attuparuthi (Hibiscus.) Muruthon (Sterculia villosa.) Śīlānthi, (Thespesia populnea) etc., when pollarded annually, give straight branches possessing soft fibre. This is an additional advantage to the fibre merchant.

There is another aspect of the question which cannot be possibly ignored, namely, that some of the fibrous species are very useful to the paper manufacturer. This is a suggestion perhaps to the plantain cultivator also, who, as "it is more than once noted and stated, cuts down the stems of plantain trees and allows them to rot on the ground." Straw was tried in the Minakshy Paper Mills at Punalür as material for the manufacture of paper and was found to be successful. As this forms the chief food of cattle for at least a few months of the year, this practice could not be encouraged. In the local paper mills, for want of suitable available materials, such articles as bamboos, gunnybags

and waste-paper are used for the preparation of paper pulp. According to Dr. F. Royle, "If the refuse of the plants that are cultivated for fibre were found not to be sufficient, the weeds that grow in such luxuriance and among which are species of *Sida* and *Grewia* and of many other genera might all yield an abundance of fibrous matter" for the manufacture of paper.

The important fibre plants of Travancore are the following:

The monocotyledonous plants—The fibre is obtained mainly from the leaves and fruits.

1. Pandanus species.

Kaitha-The screwpine.

Fam: Pandanacea.

Species of this genus can be seen growing along backwaters and along the banks of tidal rivers. The fibrous leaves of these plants, after previous treatment, are woven into mats, bags, etc. Thalavā in Central Travancore is the centre of this industry. The roots are cut and used as a substitute for cork.

The strips of fibre obtained from the aerial roots are used for making a kind of rough cordage.

2. Caryota urens.

Olattipana or Chûndapana—The Malabar sago palm.

Fam: Palmæ.

This is a tall palm found growing all over the plains and in the hills but rare in South Travancore. The leaf-sheaths, petioles, flower stalks and the stem yield a kind of fibre. The kittul fibre, as the fibre of the plant is technically known, is used in the manufacture of hair brushes, coat brushes, etc. The fibre obtained from the petioles is made into fishing lines; hence the Malayalam name chandappans.

3. Borassús flabellifer.

Karimpana-The palmyra palm.

Fam: Palmæ.

This palm is commonly found in Shenkotta, Kalkulam, Thövāla and Agastīsvaram taluks. The fibre obtained from the petioles of the leaves is used for making brushes and brooms. A fibre of inferior sort is obtained from the husk of the fruit. It is brittle and hence used only for such purposes as stuffing pillows. Sir G. Watt writes:— "There are, for example, five fibres, a loose fibre which surrounds the base of the leaf-stalk, a fibre from the interior of the stem, the fibre or coir derived from the pericarp and the fibrous substance of leaves." The palmyra palm in fact is as useful to the South Travancoreans as the coconut palm is to the North Travancoreans.

4. Cocos nucifera.

Thengu—Thengamaram—The coconut palm.

Fam: Palmæ.

The husks which cover the nuts yield an important fibre which is obtained by burying them on the shore or by soaking them in the backwaters for a period which varies from six months to one year. The soaked husk is beaten out by a mallet and the fibre obtained from it is converted into yarns, mats, belts, etc.

5. Musa Sp.

Vāla-Plantain.

Fam: Musacea.

Species of this genus grow to a height of about ten to twenty feet. Several varieties are cultivated in the plains for their fruits which are sweet and cooling. The leaf sheaths abound in fibre which is separated by scraping. The fibre obtained from the mature plants is not strong, being brittle, but it is used in mixture with cotton yarn in the manufacture of shawls which are valued because of the silky

appearance which the fibre imparts to the finished material. Sir George Watt writes on the subject as follows: "For long the fibre of the plantain has been used by the natives of India for cordage purposes, mats and coarse paper. It early attracted the attention from the fact that it so closely resembled manilla hemp, though it is not strong as the latter and can never hope to compete with it in European markets. Vast numbers of the common plantain stems are available for extraction of fibre and at present these are simply thrown away, efforts have been made in recent years to encourage the extraction of the fibre as an additional source of profit. The rapidly increasing demand for cheap string to be used as 'binders' should render this suggestion of interest to both the cultivators of fruits and the cordage manufacturers. The subject of the wild species of Musa as a source of fibre has aroused some attention and it seems possible that this idea may come to be of value....."

Di-cotyledonous plants—Fibre obtained mainly from the stem or branches.

1. Trema orientalis.

Ami.

Fam: Ulmaceæ.

A small tree found growing all over the plains and at the foot of the hills. A fibre is obtained from the bark of the branches.

2. Villebemea integrifolia.

Fam: Urticaceæ.

A tall tree which is found growing in the moist forests of Travancore. The branches of the plant are cut and retted for fibre which is strong and useful.

Unona Pannosa.

Fam: Anonaceæ.

A small tree which grows to a height of about twenty five to thirty feet. It is commonly found in the evergreen forests of Travancore. The bark yields a strong fibre which can be used for making ropes and mats.

Polyalthia longifolia.

Arana-Indian fir.

Fam: Anonaceæ

A tall evergreen tree with more or less conical growth. It is found all over in the low country as an avenue tree. The tree sends out branches annually which could be cut and retted for the ribbon-like fibre they contain.

Polyalthia coffeoides.

Villa.

Fam: Anonaceæ.

A tall evergreen tree which is commonly found in the moist forests of Travancore. The branches yield a strong ribbon-like fibre.

Polyalthia fragrans.

Nedunār.

Fam: Anonacece.

A tall tree which is found throughout the evergreen forests of the State. From the bark of the branches a strong soft fibre is obtained which is often coloured light brown.

7. Crotalaria.

Chanampu.

Fam: Leguminosæ.

As has been pointed out elsewhere, the sun-hemp fibre is used in the manufacture of fishing nets. The nets made of sun-hemp are tanned before they are taken out for use. The decoctions of parts of the following plants are generally used.

(a) Odina wodier.

Uthi.

The bark collected from the stem of Uthi tree is put in a cauldron of water and boiled for some time to prepare the decoction. In the decoction thus prepared, the nets are alternately dipped and dried several times before they are taken out for use.

(b) Clerodendron inermi.

Chankum kuppy.

The Chankum kuppy plant is cultivated by fishermen for its leaves. The leaves of this plant are gathered and in the decoction made of the same the nets are tanned before they are taken out for use. Dr. F. Royle writes about the efficacy of the practice of tanning thus:—"It will probably be found that the Indian practice of tanning ropes is also efficacious and has the advantage of not injuring the texture of the fibre".

8. Sesbania aculeata.

Mullakathi.

Fam: Leguminosae.

This is an undershrub which is commonly found growing in the plains and at the foot of the hills in Travancore. Sir (). Watt writes about the plant thus:—"Stems of this plant have long been employed locally in various parts of India to yield a strong and useful fibre which is used as a substitute for hemp. It is considered to be durable under water and is much esteemed by fishermen for making dragropes for nets......".

The stems are also commonly employed as standards in betel-vine gardens.

9. Butea frondosa.

Plāśu.

Fam: Leguminosae.

This small tree is found growing in the drier parts of Travancore. A coarse, coloured fibre fit for making ropes is extracted from this plant.

10. Acacia leucophloea.

Velvēlam or Pattachārāyā maram.

Fam: Leguminosae.

This is a medium-sized tree which is found growing in the dry forests of Travancore. Ropes and fishing nets are made of the fibre obtained from the bark of this tree.

11. Grewia tiliaefolia.

Unnam.

Fam: Tiliaceae.

This is a small tree which is found growing in the forests of Travancore. The fibre of this tree can be obtained in long, broad, white, silky bands which can be used for various purposes. This is a very valuable fibre.

Grewia laevigata, G. mocrocos, Erinocarpus nimmoanus and Triumfetta rhomboidea, are other species of indigenous fibrous plants belonging to the family Tiliaceae.

12. Hibiscus tiliaccus.

Attuparuthi.

Fam: Malvaceae.

This is a spreading tree which grows along the banks of tidal rivers and along the shores of backwaters. The tree is an excellent sand-binder. Grown on the banks of rapid rivers it successfully prevents erosion. A very strong fibre of a pale brown colour is obtained from this tree. It is used for tying round the containers of rockets (vanakkutti) to prevent them from bursting. This is a very strong fibre and may be used for making cordage, mats, hats, etc. According to Sir G. Watt, "In New Caledonia and Taihiti it is made into fishing nets. The fibre does not easily rot under water",

13. Thespesia populnea.

Pūvarasu or Sīlānthi-The portia tree.

Fam: Malvaceae.

A very soft, white, silky fibre is obtained from this tree. It can be used for making hats, table covers, etc.

14. Thespesia lampas.

Kāttu Pūvarasu.

Fam: Malvaceae.

This is a small tree which grows in the open and moist forests of Travancore. The fibre is very strong and may be used for various purposes.

15. Abutilon indicum.

Uram.

A. Polyandrum.

Thuthie.

These are two Malvaceous annual plants which yield beautiful, silky, white flowers which are greatly appreciated.

Urena lobata and U. Sinuata are two other Malvaceous under-shrubs which yield useful silky fibre. According to Drury, U. lobata yields a fibre which can be substituted for flax. U. sinuata branches profusely and therefore the quality of the fibre obtained from it is inferior.

16. Sida.

Kurunthötty.

Fam: Malvacea.

This is cultivated extensively in gardens for its roots which are highly medicinal. A strong, white, silky fibre can be extracted from this plant.

Malavenda which grows to a height of about fifteen feet, when properly manured, gives in addition to its fruits a strong white fibre which can be used for various purposes. Chemparathi (Hibiscus rosa sinensis), the shoe flower plant

which is commonly cultivated in the gardens, also yields a useful fibre.

17. Helicteres isora.

. Kaivan fibre, Valampiri.

Fam: Sterculiaceæ.

This is a small tree which yields fibre. Kaiyoon fibre is used in the manufacture of 'chelavu' or 'uruppa' and 'neppatu'. A kind of canvas is also made of this fibre. The fibre is obtained in long, white, silky ribbons and can be used for various purposes.

(Sterculia urens), Thondi.

- (S. guttata), Kīthondi.
- (S. nobilis) Nārthondi.
- (S. colarata) Malamparuthi.

These are other species of the family sterculiaceæ, which yield useful fibre.

18. Calotropis gigantea.

Erukku. Madar.

Fam: Asclepiadacea.

This plant yields a fibre which is of a superior quality. This is used by the fisherfolk in making fishing lines. If a method could be devised for the easy extraction of this fibre, the plant will prove to be a source of income to the agriculturists of the State.

19. Agave sisalna.

Anakkattala.

Fam: Amaryllidacea.

This is a perennial stemless plant probably introduced into the country from outside. It is used as a hedge-plant. A very valuable fibre is obtained from the leaves of this plant, which is used for making cordage and tying beedies. The twine made out of this fibre is invariably used as swarp in the manufacture of grass mats.

Trees yielding gums, resins, dyes and tanning materials.

A sort of milky-juice is obtained from the Sapodilla plant. This is collected by making incisions in the bark. When fresh, the latex is white in colour but on exposure it changes its colour into yellow. This gum forms the basis of the chewing-gum which is prepared by flavouring it with mint, vanilla and other ingredients.

An easy substitute for gum-arabic is obtained from *Acacia* (Karuvēlam.) In this plant the gum exudes from the branches. It is sometimes assisted by incisions artificially inflicted.

Gamboge is the yellow gum obtained from the several species of *Garcinia*. The important species that yield gamboge are *Garcinia cambogia*, G. morella, and G. Travancorica.

A kind of useful gum is obtained from Uthi (Odina wodier.) In this case the gum is an exudation from the stem.

The Dragon's blood or the gum-kino of commerce is obtained from Vēnga—a common tree in this country. The gum-resin is in this case collected by making incisions in the bark of the tree.

Plasu or Chamatha (Butea frondosa) and Athampu Valli or Plasi Valli (Spatholobus roxburghii) and Butea superba yield a kind of kino called the Bengal Kino. This gum is used in medicine and also in tanning and precipitating indigo. It readily dissolves in hot water giving it a red tinge. The gum is specially useful for tanning thick hides.

The fruits of the Panacha maram (Diospyros embryopteris), contain a large quantity of gum and tannin both of which are locally used.

A sort of gum resin is obtained from "Perumaram" (Ailanthus), a lofty tree which is commonly seen in the evergreen forests and also at low elevations. This is popularly known as "mattipal." It is used in medicine especially in the treatment of dysentery, diarrhoea and general debility.

According to Drury the gum-resin obtained from Perumaram may be substituted for 'Venace' turpentine. When burnt the gum gives out a very agreeable fragrance and so it is generally used as an incense.

Vļāthi or Vļānkā, the wood apple—Feronia limonia, affords a valuable gum. This is used in medicine and in arts.

Parankimāvu (Anacardium occidentale) and Vēmbu (Azadirachta indica) also yield a kind of clear transparent gum. The gum got from Parankimāvu is supposed to be poisonous to insects, while that obtained from Vēmbu is medicinal.

Muringa (Moringa oleifera) yields a kind of gum. It is used for various purposes in medicine and in arts. The gum is obtained from incisions made in the bark of the tree.

Iluppa (Bassia longifolia) and Shurali (Hardwickia binata) are also gum-yielding trees. The gum obtained from Shurali is said to be as useful as copaiba, while the gum obtained from the bark of Iluppa is substituted for guttapercha.

Thellimaram, the black dammer (Canarium strictum) yields the resin known as dammer.

Veila Kunthirikkam or White dammer is a product obtained from the payin tree (*Vateria indica*). The seeds of the payin tree yield a solid oil which is useful in making candles.

The Kamila dye is the product of Ponnagan (Mallotus philippinensis). This dye is of a rich red colour and is used all over India especially for silk to which it gives a fine yellow colour.

The two myrobalams "Kadukkā" (Terminalia chebula) and Thānnikkā (T. belerica) supply materials for the purpose of tanning and preparation of ink and a good yellow dye.

Manchanāthi (Morinda tinctoria) yields a yellow timber. The heart-wood of the old Manchanāthi tree yields a dye. From the roots of Nūnamaŕam (orinda umbellata,) is obtained a dye of permanent yellow colour. Nūnamaŕam is a climbing plant commonly met with in the country.

The henna-plant (Lawsonia inermis,) is commonly cultivated for its small oval leaves which yield the 'henna' dye.

Several shrubby plants belonging to the genus *Indigofera* occur in a wild state in Travancore, chiefly in the dry regions. A blue dye called indigo (Nīlum) is obtained from several of these species. But owing to the introduction of synthetic indigo and for other reasons these plants are used only for medicinal purposes.

The reddish heart-wood of chappangam (caesalpinia sappaa,) yields a red dye which is widely used.

A pale, greenish-grey lichen, called the Orchella weed (Roccelle montaguei) is found growing in the hot dry areas of Travancore. It is collected and used in the manufacture of orchil, litmus, etc.

The yellow tuberous root of Manjal—Turmeric (Curcuma loaga) is commonly employed for dyeing wool and silk.

The heart-wood of Plavu (the jack tree) yields a yellow dye, while a brown dye is obtained from Pterocarpus marsupium.

The flowers of Pavilamally (Nyctanthes arbor-tristis,) the roots of Oldenlandia umbellata and the flowers of Hibiscus sinensis also yield dyes.

The juice of Chērkkuru (Semecarpus anacardium,) is mixed with quick lime and used for marking linen.

Annatto dye which is used to colour butter and chocolate is obtained from Kuppa manjal (*Bixa ordlana*). The dye is prepared by macerating the seeds in water and then evaporating the water to a suitable consistency after removing the seeds.

The bark of Panichakandal (Rhizophora mucronata), the wood of Manchadi (Adenanthera pavonina), the bark of

Njāra (Eugenia jambolana), Pēļu (Careya arborea), the bark and leaves of Pērakkāmaram (Psidium guajava,) and the bark of Elanji (Mimusops elenji,) afford materials for dyeing.

There are several species that yield tanning materials. The divi-divi pods (Caesalpinia coriarīa,) afford very valuable tanning material. The small twisted pods are picked when fully ripe, the proper condition being indicated when the seeds can be heard to rattle in the pods. These are the best for the purpose of tanning. The fallen pods are often classed as second quality.

The barks of several species of Acacia are among the best of tan-barks. The most important of these are arivēlam (Acacia farnesiana), odai-the umbrella thorn (A. planiformis) Karivēlam—the Babul tree (A. Arabica) karivali or karunjāli (A. suma) the cutch tree (A. sundra) Karodi, (A. ferruginea) or nirodei (A. lotronum).

The bark of Vāha (Albizzia lebbeck) and the root of Potentilla supina are used in tanning.

The other important plants yielding materials used in tanning are, Kamukumaram (Areca catechu), Panachimaram (Diospyros embryopteris), Panicha kandal (Rhizophora mucronata), Ankandal (Ceriops candolleana), Nelli (Phyllanthus emblica), Thānni (Terminalia belerica), Kadukka (T. Chebula), Āttumaruthu or Nīrmaruthu (T. arjuna), Thallithēnga (T. catappa), and Maruthu (T. paniculata).

Plants yielding Oil.

Several species of plants yielding oil are met with in Travancore. Chief among them are Ellu (Seasamum orientale). This is an important oil seed crop in Travancore. This oil is highly valued as a good table oil. It is used in cooking, medicine and soap-making. Medicinal oils are also prepared from this for anointing the head and the body. This oil called the gingelly oil or sesamum oil is obtained from the seeds by expression.

Cocos nucifera.

Thengu—The coconut palm.

A light oil is obtained from the kernel of the coconut. It is used for anointing the head and body and in the manufacture of candle and soap. It is the chief table oil in Travancore, being used in cooking.

Cymbopogon species.

Lemon grass.

A highly valuable medicinal oil is distilled from these plants. The oil is used in medicine, perfumery and soapmaking.

Andropogon squarrosus.

Rāmaccham.

An oil is distilled from the roots of this grass which is used in perfumery and soap-making.

Bassia latifolia and B. malabarica.

Iluppa.

The seeds of these plants yield a thick oil which is useful for application in skin diseases and for anointing the head. This oil is also used for burning, for adulterating ghee and for candle and soap making.

An oil is obtained from the seeds of Elanji (Minusops elengi). It is used for lighting purposes as well as for seasoning food.

The oil obtained from Palla (M. hexandra) is considered to be demulcent, emollient, tonic and alterative.

Azadirachta indica.

Vēppu.

The seeds of this plant yield the valuable Margosa or Neem oil which is extensively used in the preparation of medicinal oils. In some places it is also used as a lighting oil. Hydnocarpus wightiana.

Maravetty.

The seeds of this tree yield a very valuable oil. Formerly it was used for lighting purposes and rarely in the preparation of medicinal oils like "Thakali enna". It is now extensively used in the treatment of leprosy.

A very valuable oil is extracted from the heart-wood of Chandanam (Santalum album) which is used both in medicine and perfumery. In Travancore, however, the extraction of the oil is not practised.

Ricinus communis.

Avanakku—The Castor.

The oil obtained from the seeds of this plant is used medicinally and also as a lubricant for heavy machinery.

Anacardium occidentale.

Parankimāvu—The cashew nut.

An oil which is superior to olive oil and equal to almond oil is obtained from the fruits of this plant. The pericarp of the fruit yields the aerid 'cardole' of commerce which is used for tarring boats and also as an external application for leprosy, ringworm and ulcers. It is considered to be a preventive against white-ants.

Though Valana plants (Cinnamomum zeylanicum) are abundant in Travancore, cinnamon oil is not extracted to any extent.

Artocarpus hirsuta.

Anjili.

An oil is extracted by boiling the seeds of this tree.

Schleichera trijuga.

Pūvaņņu or Pūvam.

The seeds of this plant yield an oil which is popularly known as "macassar oil", which is considered to be a

valuable stimulating and cleansing application to the scalp.

The extraction of perfume from flowers and other plant parts is an important source of income, though it is not extensively practised in the country. Some plants which may be used for the extraction of scent either by distillation or maceration are met with in Travancore. They are the roses. The petals of this plant, when distilled, yield an oil called Attar of Roses. Several species of citrus yield valuable perfume from their rind. The flowers of the Pagoda tree (Plumeria species) also afford material for the extraction of perfume. Jasmine (Jasminum species), Pogostemon patchouli, Kāttuchempakam (Cananga odorata), Chempakam (Michela champaka), Elanji (Mimusops elengi), Pavilamally (Nyctanthes arbor-tristis), Mylānchi (Lawsonia inermis), Musk-mallow, (Ocimum species and Gaultheria fragrantissima) may also be used for the extraction of perfume.

The oil obtained from the seeds of Nīrvāļam (croton tiglium), known as the "croton oil" is used in medicine. It is a drastic purgative. It is used in incipient apoplexy, visceral obstruction, dropsy and rheumatism. It is also believed to be an anthelmintic.

The fruit and mace of the Jāthikkā maram (Myristica frgrans) contain an oil which is largely used in perfumery. It is also used to remove foul breath and to improve complexion.

The Principal lac trees in Travancore.

Lac or Shellac is produced by a species of scale-insects (Tachardia lacca) which live on the tender branches of certain species of trees. This is largely used is the manufacture of varnishes, french polish, lacquer, sealing-wax, paints, lithographic inks, gramophone-records and such other articles of economic importance.

Lac is at present a forest product. The peasants collect it from wild trees that grow in the forest region. In a

suitable climate the cultivation of lac seems to offer prospects of a profitable industry which does not interfere with the ordinary occupation of the agriculturists.

The quality of the lac is determined by the species of trees on which it is produced. The lac obtained from Pūvaṇṇu or Pūvam (Schleichera trijuga) and Chamatha (Buteo frondosa) is believed to be superior to that produced on other species of trees.

The principal lac-trees are:

- 1. Albizzi stipulata.
 - Pottavāha.
- 2. Buteà frondosa. Chamatha or Plāśu.
- 3. Croton aromaticus.
- 4. Fiens religiosa.

Arasumaram—The Peepal tree.

- 5. Filicium decipiens. Valmuricha.
- 6. Harpullia cupanioides.
 Chittilāmadakku or Nei-kottai.
- 7. Mangifera indica.

 Mayu or Mamaram.
- 8. Pithecolobium Saman.
 The Rain Tree.
- 9. Zizyphus jujuba.

Elantha—The Jujuba tree or the Chinese-date.

No comprehensive economic survey has as yet been conducted to ascertain the extent of the wealth of medicinal plants possessed by the State. The Medicinal Plants. "Simples" or "Ottamūlies" which were once known to almost every individual have been proved to be possessed of very efficient curative qualities. Several serious diseases are known to have been cured by the judicious use of such simple remedies. The

greatest bane is that these Ottamūlies are often kept under a veil of mystery and the knowledge of the virtues of these plants is secretly transmitted by word of mouth to tried chēlās or beloved descendants only. Several such valuable prescriptions haver owing to the stubborn and orthodox nature of these conservative adepts, now disappeared from our midst.

At present the physicians rely entirely either on the natural growth of the plains or on the plants that occur wild in the State forests. Conservation and artificial regeneration of medicinal plants could be conveniently taken up in suitable places according to necessity. Some of the most important and highly valuable medicinal plants which are cultivated in the kitchen gardens for domestic use are:—

Adathoda Vasica.

Coleus. Sida.

Tinospora cordifolia. Hibiscus sabdariffa.

Carica papaya.

Ocimum. Piper betel.

Piper nigrum.

Murraya Koenigii.

Aegle marmelos. Feronia Limoni.

 $Moringa\ oleifera.$

Myristica fragrans.

Michelia champaka.

Citrus aurantifolia.

Punica granatum.

Vitex negundo.

Ricinus communis.

Artocarpus integar. Curcuma longa. Adalodakam.

Panikūrka. Kurunthōtti.

Amrithu.

Karipuļi.

Pappāli. Thulasi.

Vettila.

Nallamuļaku.

Karivēppila.

Kūvaļam or Vilvam. Vlāthi—Wood-apple.

Muringa—Drumstick.

Jāthikkāmaram—Nutmeg.

Champakam.

Cherunāranga—Lime fruit.

Māthaļam—Pomegranate.

Nocchi-Chaste tree.

Chittavanakku—Castor oil

plant.

Plavu—Jack tree.

Manjal—Turmeric.

Zingiber officinalis.

Kæmbferia galanga.

Areca catechu.

Sesbania grandiflora.

Desmodium.

Pseudarthria viscida.

Abrus precatorius.

Erythrina indica.

Clitoria ternatea.

Cassia fistula. Saraca indico.

Tamarindus indica.

Capsicum annum.

Azardirachta indica.

Hibiscus abelmoschus.

Oxalis corniculata.

Cardiospermum halicacabum. Ulinja—Heart-pea.

Spondias mangifera.

Psidium guajava.

Lawsonia inermis.

Coriandrum sativum. Plumbago Zeylanica.

Plumbago rosea.

Mimusops elengi.

Jasminum grandiflorum.

Jasminum sambac.

Nyctanthes arbor-tristis.

Ervatamia coronaria.

Holostemma annulare.

Solanum nigrum.

Solanum xanthocarpum.

Datura fastuosa.

Emblica officinalis.

Asparagus racemosus.

Inchi-Ginger.

Kacholam.

Arecanut—Adakkāmaram.

Agathi. Ōŕila.

Mūvila.

Kunni.

Muřukku-Coral tree.

Sanku pushpam.

Kaņi Konna—Pudding pipe tree.

Aśōkam. Pulimaram.

Mulaku—Chilli varieties.

Vēppu maram—Margosa tree.

Chemparathi—Shoe flower.

Puliyārila—Yellow wood-sorrel.

Ambalam-Hogplum tree.

Pērakkāmaram—Guava tree.

Mylanchi--Henna shrub. Kotthamally—Coriander.

Vellakkoduvēli.

Rose-coloured Leadwort

chuvappu koduvěli.

Elanii.

Picchakam.

Mulla - Arabian Jasmine.

Pavilamalli.

Nanthiārvattam.

Adapothian.

Kuruthakkāli—Garden

night-shade.

Kandan kathari.

Ummam.

Nelli-Emblic myrabolam.

Śathā vari.

Acorus Calamus. Andropogon squarrosus. Gynandropsis pentaphylla. Vayampu—Sweet flag. Rāmaccham—Khus-khus. Kāttukaduku.

The cultivation of medicinal plants on an organised plantation scale has not yet been attempted in the State. In this connection we have to point out that it is high time for us to follow the lead of countries like Germany and Belgium where the cultivation of medicinal plants and plants yielding essential oils has proved successful and lucrative.

The medicinal plants and plant parts that are required for the preparation of the several Ayurvēdic medicines are now being collected by professional collectors who have absolutely no knowledge of vegetable morphology or of the medicinal properties of the plant they collect.

The only feasible method by which defects in identification could be rectified is to collect carefully the several useful medicinal plants and preserve them in a herbarium with details such as locality, time of flowering, vernacular names and scientific names. Since the scientific name is the same all over the world, it will effectively prove to be a solution for the grave difficulties attendant on the classification of useful species of plants.

The most important medicinal plants of Travancore are:—

1. Tinospora cordifolia.

Amrithu or Amrithuvalli.

Fam: Menispermacea.

This is a common twining shrub which is generally cultivated in gardens for its stem, leaves and roots, all of which are medicinal. It is considered to be tonic, alterative, antiperiodic and diuretic. It is also used in gonorrhoea and consumption. In the preparation of medicine the fresh plant is said to be more efficacious than the dry,

2. Santalum album.

Chandanam-The Sandal wood.

Fam: Santalaceæ.

This is a small evergreen tree found in Anchanad valley and near Marayūr in North Travancore. It gives the best scented heart-wood when grown between 2,000 and 3,500 feet above sea level with a rainfall of twenty to fifty inches. The roots and the heart-wood yield about two and a half to five per cent. of sandal oil which is used for various purposes. Sandal wood is considered to be bitter, cooling, astringent and useful in bilious fevers. In the form of a paste it is applied in prickly heat and skin eruptions. The essential oil is demulcent and diuretic. It is useful in gonorrhœa and chronic cystitis. The fragrant wood has been used in India from a very early period. It occupies an important place in Hindu ceremonies.

3. Strychnos Nux-Vomica.

Kānjiram—The Nux Vomica or Strychnine tree. Fam: Loganiaceæ.

This is a large tree which is commonly seen growing wild up to an elevation of 1,000 ft. above sea level. Nux Vomica in large doses is a virulent poison and produces tetanic convulsions. In proper doses it is a powerful nervine tonic and stimulant. An oil obtained from the seeds is used externally in rheumatism. The bark and wood are also used as bitter tonics. The seeds of this plant are collected and exported to Europe for the extraction of the two alkaloids strychnine and brucine.

4. Strychnos potatorum.

Thettamparal or Thettamkotta—The clearingnut tree.

Fam: Loganiaceæ.

A tree of medium size which grows in the drier parts of the State such as Nagercoil and Shenkotta. The seeds

are non-poisonous. The pulp of the fruit is an excellent emetic and a good substitute for *Ipecacuanha* in the treatment of dysentery and bronchitis. The seeds have been used from very early times in India for clearing muddy liquids. They were also used in the treatment of eye diseases.

5. Cassia angustifolia.

Sunnāmukki or Nilavāhai—The Senna plant. Fam: Leguminosæ.

This is an under-shrub, very commonly found in Aramboly, Marungūr, Mylādi, Köttayam and other places. The leaves and legumes have mild purgative properties. They are useful in diseases caused by the accumulation of corrupt humours. They expel worms from the intestines and are useful in piles and skin troubles.

6. Hydnocarpus wightiana.

Maravetty.

Fam: Bixaceæ.

The seeds yield an oil which is used as a substitute for chaulmugra oil in the treatment of leprosy. It is also a remedy for scabies and ulcers of the feet.

7. Samadera indica.

Karinjotta.

Fam: Simarubaceæ.

This is a small tree growing along the back-waters and in sandy places. The bark and seeds are very bitter and are used in medicine. Niepa bark, as the bark of this tree is known, is believed to be a febrifuge. The oil obtained from the seed is used in the treatment of rheumatism. The infusion of wood is considered to be tonic. Wearing sandals made of this wood is believed to give immunity from rheumatism. The bark is a very good substitute for quassia.

8. Lawsonia alba.

Mylanchi-The Henna shrub.

Fam: Lythraceæ.

Its bark, leaves and flowers are used in medicine. The bark is given in jaundice and enlargements of the spleen. The juice of the leaves with water and sugar is given in spermatorrhea and with milk in fits. The oil obtained from the seeds acts as cephalic and is given with other ingredients. The flowers are sweet-scented and are used in the preparation of medicine and perfumery.

9. Moringa oleifera.

Muringa—The Drumstick tree.

Fam: Moringacea.

The fresh root is used externally as a vesicant. It is also useful in the treatment of rabies and hysteria. A decoction of the root-bark is useful in enlarged spleen and liver, internal inflammation and calculous affections. The flowers are used to expel cold humours and to disperse swellings. They are also considered to be diuretic and tonic. They help the secretion of bile in sufficient quantity. The flowers are boiled with milk and taken as an aphrodisiac. An oil which is useful in the treatment of rheumatism is obtained from the seeds.

10. Holarrhena antidysenterica.

Kodaka pāla—Kurchi.

Fam: Apocynaceæ.

A small tree which grows up to a height of thirty feet and is common in deciduous forests at lower elevations. The bark is bitter, astringent, cold and digestive. It is used as a remedy in piles, dysentery and phlegmatic humours. The seeds are astringent and anthelmintic.

11. Adathoda vasica.

Adalodakam-The Malabar nut plant,

Fam: Acanthacea,

All parts of the plant possess a bitter aromatic taste and are supposed to be antispasmodic. The roots are expectorant. The root, bark and leaves are useful in cough, asthma, ague and phthisis. The small variety is the one which is generally used in the preparation of Ayurvedic medicines.

12. Mucuna pruriens.

Nāikuruņa or Pūnakkāļi—The cowhage plant. Fam: Leguminosæ.

This is a twiner which is found growing throughout the State. The root is considered to be a remedy in facial paralysis, hemiplegia and dropsy. The seeds are considered to be aphrodisiac and are used in spermatorrhea. A decoction of root or powder is considered to be a remedy for rheumatism, phlegm, biliousness, impure blood, consumption, asthma and cough. It improves vitality and cures ulcers and stones in the bladder. The hairs scraped from the pods are mixed with molasses and then given to patients to expel worms.

13., Ruta graveolens.

Arvada, Sadab or Ārupatham pacchila—The Garden Rue.

Fam: Rutaceæ.

This is a small shrub which is cultivated in Indian gardens. An essential oil is distilled from this herb. It is used as a stimulant to the uterine and nervous systems and is given in hysteria and amenorrhoea. It is also used in the treatment of certain obscure diseases in children. It is considered to be hot and dry, tonic and digestive. It increases the urinary and menstrual excretions. When given to pregnant women it causes abortion. It is an active irritant both when applied externally and taken internally.

14. Canarium strictum.

Kunthirikka maram—The black dammer. Fam: Burseraseæ.

The tree yields a resin which is largely used in medicine. The decoction or powder of the resin is given internally as a remedy in rheumatism, cough, fever, epilepsy, asthma, syphilis, hernia and hæmorrhage. As a liniment with gingelly oil it is successfully used in the treatment of rheumatic pains.

15. Naregamia alata.

Nilanārakam.

Fam: Meliaceæ.

This is a small under-shrub. It is found almost throughout the State. The roots possess emetic properties and are used in acute dysentery and in chronic bronchitis. Root and leaves are used in rheumatism, biliousness, indigestion and itches.

16. Cardiospernum halicacabum.

Mudakkathan or Ulinja-The Heart-pea.

Fam: Sapindaceæ.

This is a small twining herb which is found throughout Travancore. The root of this plant is considered to be emetic, laxative, stomachic and rubifacient. The juice of the plant is given to promote the menstrual flow. A decoction of the whole plant is considered to be a laxative. It enriches the blood and removes the disorders in the womb.

17. Argemone mexicana.

Ponnummathu or Brahmadandi—The Mexican Poppy.

Fam : Papaveraceæ.

This is a small prickly under-shrub which is used in the treatment of gonorrhoea, jaundice and dropsy. The juice of the plant is diuretic and helps the healing process in exceriations.

18. Hemidesmus indicus.

Narnindi or Nannāri—The Indian sarsaparilla. Fam: Asclepiadaceæ.

This is a twiner which is found growing all over the country except in water-logged situations. It is considered to be demulcent, alterative and tonic. It is prescribed in dyspepsia, dysentery, syphilis, fever and skin diseases and even in inflammation of the urinary passages.

Ichnocarpus frutesciens.

Pālvalli.

Fam: Apocynaceæ.

In Hindu medicine this is often used with Nannāri and is considered to have similar properties.

19. Cerbera manghas.

Othalam.

Fam: Apocynacea.

This is a small handsome tree which is found along the backwaters and the banks of tidal rivers. The milky juice, bark and leaves are considered to be emetic and purgative. The fruits combined with Datura is a part of the remedy given by the native physicians for (mad-dog bites) rabies.

20. Alstonia scholaris.

Elilam pāla or Mukkam pāla.

Fam: Apocynaceæ.

A distinctly buttressed tree found in our deciduous and evergreen forests. The bark is tonic, alterative and useful in fever, skin diseases and dyspepsia, especially of the catarrhal type. It is also a powerful galactagogue and anthelmintic. Sometimes it is used as a local application to ulcers and rheumatic joints.

21. Ervatamia coronaria.

Nanthiarvattam-The Ceylon Jasmine.

This is a small shrub which is grown for its beautiful white flowers. The milky juice mixed with oil is rubbed on

the head to cure pains in the eyes. The root is chewed to relieve tooth-ache. It is also used to exterminate intestinal worms. The flowers are used in inflammation of the cornea.

22. Plumeria acutifolia.

Ilachampakam—The Jasmine tree—The Pagoda tree.

Fam: Apocynacea.

The root-bark of this tree is a strong purgative and is useful in gonorrhoea and venereal sores. A plaster made of the bark is used in dispersing hard tumours. The milky juice is useful in rheumatic pains. In intermittent fever the bark is used in the place of cinchona. The flower buds with betel leaves are also used as a febrifuge.

23. Holostemma annulare.

Adapothian.

Fam: Asclepiadaceæ.

. It is a climber which is cultivated in the gardens for its very pretty flowers and medicinal roots. The root is used in dimness of vision and ophthalmia.

24. Calotropis giagantea.

Erukku-The Madar.

Fam: Asclepiadaceæ.

The root-bark and juice of this shurb are diaphoretic, emetic, alterative and purgative. In small doses it may be used in leprosy, elephantiasis, secondary syphilis and rheumatism.

25. Enicostemma littorale.

Vellarugu.

Fam: Gentianaceæ.

This is a small herb which is generally found in Central and South Travancore, especially in the coastal region. This is used as a remedy in dropsy, rheumatism, abdominal ulcers, hernia, swellings, itches and in advanced gonorrhoea, with severe dietetic restrictions.

26. Crataeva riligiosa.

Māvilangam, Nīrmāthaļam.

Fam: Capparidaceæ.

The leaves are bitter and are used in the treatment of rheumatism. The root and bark are used in calculous affections and urinary complaints. The barks of the root and stem are dried, powered and administered in honey as a remedy for hydrocele, worms, gout, heart-disease, colic, diseases of the womb, partial paralysis and congestion in the abdomen.

27. Ionidium suffruticosum.

Örilathamara.

Fam: Violaceæ.

This is a small herb which is found growing all over the plains in Travancore. The root is diuretic and is a remedy in gonorrhoea and affections of the urinary organs. The whole plant is taken as a tonic and as a remedy in consumption, asthma, fever and leprosy. There is another plant known by the same vernacular name.

28. Oxalis corniculata.

Puliyārila-Yellow woodsorrel.

Fam: Oxalidacea.

This is a creeping herb found in moist situations throughout. The plant is cooling and is useful in dysentery, dyspepsia, fever and scurvy. The medicinal property is believed to be due to the presence of acid oxalate of potassium. It is useful in removing warts and other growths over the cornea. The plant is also useful in the treatment of rheumatism, diarrhoea, piles, biliousness and indigestion.

29. Glycosmis cochinchinensis.

Pāṇal or Pānchi.

Fam: Rutacece.

The root is given in low fever, while the wood is an antidote for snake poison. Decoction of root is useful in diarrhoea and rheumatism.

30. Cissus quandrangularis.

Peranda or changalam peranda.

Fam: Vitaceæ.

This is a climbing shrub found in the dry regions of Travancore. This plant is used in bowel complaints, affections of the spine, ottorrhoea, epistaxis, scurvy and irregular mensus. It is also used as a remedy in the bites of poisonous insects.

31. Sesbania grandiflora.

Agathi.

Fam: Leguminosæ.

The bark is astringent. The root is used in the treatment of rheumatism and bronchial catarrh. The juice of the flowers is used in dimness of eyes and nasal catarrh attended with headache.

32. Saraça indica.

Aśōkam—The Asōka Tree.

Fam: Leguminosæ.

It is cultivated for its bark which is highly medicinal. The bark is astringent and is used in the treatment of biliousness, worms, ulcers, bowel complaints, hæmorrhage and dropsy. The flowers are useful in the treatment of biliousness and syphilis. The leaves are also used in medicine.

33. Cassia fistula.

Kanikkonnai-The pudding-pipe tree.

Fam: Leguminosæ.

The root and leaves are used in jaundice, stomach disorders, abscesses, heart-diseases, itches and syphilis. The pulp of the fruit is cathartic and removes thoracic obstructions.

34. Mollugo pentaphylla.

Parpadakappullu.

Fam: Aizoaceæ.

This is a creeping herb found at low elevations and in the plains. The plant is aperient, antiseptic and stomachic. It is given to women to promote menstrual discharges. Given in fever, it promotes perspiration.

35. Alangium salvifolium.

Ankölam or Alinjal.

Fam: Alangiaceae.

The root-bark is anthelminic and purgative. It is also given in biliousness, impure blood, worms, epilepsy, ratpoison, hydrophobia and insanity. The fruit is edible. It is considered to be cooling, tonic and nutritive and is given in consumption and hæmorrhages.

36. Ixora coccinea.

Thetti or Chetthi-The Ixora plant.

Fam: Rubiaceæ.

The root and flowers are used in medicines, especially in the treatment of dysentery, fever, gonorrhoea, itches, jaundice and eczema.

37. Borreria hispida.

Tharavu or Tharthavel or Kudalchurukki or Natthachūri—The Button weed.

Fam: Rubiaceae.

This is a hispid herb which is found growing in the plains. The seeds are said to be aphrodisiac, cooling, demulcent and tonic and are used as coffee. They are supposed to be useful in the cure of hæmorrhoids. The root resembles sarsaparilla and is used as a blood purifier and in rheumatism, indigestion, biliousness, dropsy and worms.

38. Eclipta alba.

Kaiyonni-Kaiyanthakara.

Fam: Compositæ.

This is an annual herb which grows in moist places. It is useful in anaemia, indigestion, worms, asthma, rheumatism, cough and other phlegmatic troubles. Oil boiled with the juice of this plant is useful in head and eye diseases.

39. Plumbago zeylanica.

Koduvēli or Chithramūlam.

Fam: Plumbaginaceæ.

The root is used in medicine. It is useful in dyspepsia, enlarged spleen and rheumatism. It contains plumibagine which has vesicant properties.

40. Embelia ribes.

Vāyuviļangam or viļāl.

Fam: Myrsinaceae.

This is a large climbing shrub with small white or greenish-white flowers with pepper-like fruits. The root is useful in the treatment of phlegm, rheumatism, worms, ulcers, cough, heart disease and stomach-ache. The seeds are used in the treatment of snake-bite, leprosy and swellings. They are powdered and used as an effective anthelmintic. They are also useful in the treatment of gonorrhoea and piles.

41. Bassia latifolia.

Iluppa-The Moa tree.

Fam: Sapotaceæ.

The flowers mixed with milk are cooling, demulcent, nutritive, tonic and stimulant. The oil is used externally and internally in rheumatism and skin disease.

- B. Longifolia, is another species with almost the same qualities.
 - 42. Nyctanthes arbor-tristis.

Pavilamally -- Pārijāthagam.

The bark is expectorant and is given to cure consumption, eczema, biliousness, ulcers and itches. The leaves also possess medicinal qualities.

43. Azima tetracantha.

Eśanku.

Fam: Salvadoracco.

This is a straggling spiny shrub which is seen in the drier regions of the State. The leaves are useful in the treatment of rheumatism, cough and ulcers. The bark is antiperiodic, expectorant, and astringent. The root is believed to possess diuretic properties.

44. Solanum trilobatum.

Thūthuvila.

Fam: Solanacea.

This is a prickly, trailing or climbing under-shrub which grows in the drier regions like Shenkotta and Nānjanād. The root and leaves are useful in the treatment of consumption and cough. The berries and flowers are also useful in the treatment of cough.

45. Solanum nigrum.

Thakkāļi or Maņathakkāļi or Muļakuthakkāļi
—The Garden Night Shade.

Fam: Folanaceæ.

The fruit fried in ghee is a remedy for piles, fever, asthma, impure blood and gonorrhoea. The leaves are cooked and eaten as vegetable. They possess laxative properties. All parts of the plant possess alterative and diuretic properties. The berries and flowers are useful in consumptive cough.

46. Solanum indicum.

Puttharicchunda-The Indian Night Shade.

Fam: Solanaceæ.

The root forms one of the ingredients of "Daśamūla" (the ten roots). The fruit is considered to be antibilious and anthelmintic. It is useful in piles, diarrhoea and dysentery. The root is also possessed of the above qualities and in addition it is useful in the treatment of typhoid and other fevers. According to Drury, the plant is used in difficult parturitions.

47. Solanum xanthocarpum.

Kandankathari.

Fam: Solanaceæ.

The root is one of the "Daśamūlis" and is used in cough, asthma, bronchial catarrh and fever.

48. Datura fastuosa.

Ummam—The thorn apple.

Fam: Solanaceæ.

For medicinal purposes generally the dark-purple variety is preferred. The plants are credited with narcotic, anodyne and antispasmodic properties like Belladona. The dried petals and leaves are smoked to relieve paroxysms in asthma. They are useful in the treatment of enlarged testicles, glandular swellings and gout. The plant is also used in the treatment of snake-bite (poisoning) and in hydrophobia.

49. Moniera cuneifolia.

Nīrbrahmi.

Fam: Scrophulariaceæ.

The whole plant is considered to be a nervine tonic and is useful in the treatment of insanity, obstinate costiveness and retention of urine. It is diuretic and aperient. The plant juice mixed with petroleum is externally used in cases of rheumatism.

50. Andrographis paniculata.

Kiriyathu.

Fam: Acanthacea.

The whole plant is intensely bitter. It is believed to be tonic, stomachic, alterative, stimulant, aperient, anthelmintic and febrifuge. A decoction of the whole plant is given to cure asthma, swellings, gonorrhæa, consumption, piles and colic.

51. Lippia nodiflora.

Poduthalai.

Fam: Verbenacea.

The plant is believed to be demulcent, febrifuge, diuretic and a good maturant. It is also useful in lithiasis and indigestion.

52. Clerodendron inermi.

Sankamkuppy or Pināri.

Fam: Verbenacew.

It is useful in gonorrhoea, fever, indigestion, epilepsy, itches, ulcers and leprosy. The root boiled in oil is used in the treatment of rheumatism.

53. Achyranthes aspera.

Kadalādi.

Fam: Amarantacea.

The seeds of this plant are useful in the treatment of hydrophobia, snake-bites, cutaneous affections, biliousness and cough. The decoction of the root of this plant is useful in the treatment of rheumatism, phlegm, nausea stomachache, hæmorrhage, boils, indigestion, piles and dropsy. It is also diuretic and therefore useful in renal dropsy.

54. Aristolochia indica.

Garudakkodi.

Fam: Arstiolochiacea.

The root is a powerful emmenagogue. It has antiarthritic virtues and is a valuable antidote for snake-bite and bites of poisonous insects. It is used in leucoderma, dropsy, cholera, and diarrhœa. The leaves are used in the treatment of swellings, eczema, fever and croup.

55. Phyllanthus emblica.

Nelli.

Fam: Euphorbiaceæ.

The fruit is used in the treatment of phlegm, excess of salivation, vomiting, giddiness, syphilis, fever, worms, indigestion and impure blood. The leaves, bark and root are also used in medicine.

56. Gloriosa superba.

Mënthonni.

Fam: Liliacea.

The root made into a paste and applied to the suprapubic region and vagina promotes labour pains. It is also made into a paste and applied to the soles of the feet to accelerate delivery. The root of the plant is "boiled in the water of tender coconut and lime juice, dried, powdered and given in minute doses in hot weather as a remedy for piles, rheumatism, worms, leprosy, ulcers, itches, asthma and various abdominal complaints." The root is very poisonous and must therefore be cautiously administered.

57. Daemia extensa.

Vēlipparathi.

Fam: Asclepiadacea.

The leaves of this plant are used in snake-bites. They are also used as emetics and expectorants. A decoction of the root is given to cure cough, biliousness, asthma, insanity, leprosy, gonorrhæa, rheumatism and consumption and even in prickings in the uterus.

58. Cineraria maritima.

Kolunthu.

Fam: Compositæ.

This is a herbaceous annual which is cultivated for its sprigs which are aromatic. The sprigs are periodically harvested and sold in the market more as an article of perfumery than as a medicinal commodity. It is also useful in the preparation of medicated oil for certain eyediseases. A preparation under this name is imported from America at an exorbitant cost for the treatment of cataract.

Thovala in South Travancore is the seat of Kolunthu cultivation. About ten acres of land are annually put under this crop. If the plant could be utilised here for the preparation of the costly medicine specified above, it will certainly be sufficient inducement to the local cultivators to extend the cultivation of this crop.

59. Ocimum species.

Thulasi.

Fam: Labiata.

Two well known species of this genus are commonly met with in Travancore, namely, *Ocimum basilicum* (Rāmathuļasi) and *Ocimum sanctum* (Krishnathuļasi). They are used in the treatment of fever, asthma, cough, phlegmatic troubles and cholera. As this is a sacred plant of the Hindus, it is found cultivated in a prominent place in every Hindu home.

60. Gannabis sativa.

Ganja.

Fam: Moraceæ.

At present the Government are engaging coolies to destroy the natural growth of this plant in the hills.

From the Administration Report of the Excise Department it is found that the State purchases about 5,000 seers of ganja every year. If a little care is bestowed on the cultivation and curing of the indigenous ganja, it will certainly give the State a huge return of profit,

The plant is considered to be stimulant, secondarily anodyne, antispasmodic, anæsthetic, anthelmintic, diuretic, narcotic and digestive.

61. Terminalia belerica.

Thanni-The Belleric myrobalam.

Fam: Combretaceæ.

The unripe fruit of this tree is considered to be a purgative, while the fully ripe fruit is astringent and is used in the treatment of dropsy, piles and diarrhoea. The fruit is an ingredient of the famous 'fruit triad' (Thriphala) which is a remedy very much prescribed in a large variety of ailments.

62. Terminalia Chebula.

Kadukka—The Chebulic myrobalam.

Fam: Combretaceæ.

The decoction of the dried fruit is used as a purgative and is also used in the treatment of asthma, cough, piles, syphilis and leprosy.

63. Trichosanthes cucumerina.

Kāttu padavalam.

Fam: Cucurbitacea.

This is a climbing annual with very valuable medicinal properties. The juice of the leaves of this plant is very bitter and is emetic. It is used in congestion of the liver, bilious head-ache and ague. The fruit and seeds are also used in medicine, the latter being antiferbrile and anthelmintic.

64. Murraya koenigii.

Karivēppila—The kari leaf tree.

Fam: Rutaceæ.

The bark and root of this small tree are stimulant and are used externally in the bites of venomous animals.

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The leaves are useful in dysentery, rheumatism, piles, diarrhœa, fever and worms. The root is laxative.

65. Kaempferia galanga.

Kacholam.

Fam: Scitamineae.

These herbaceous plants are cultivated for their tubers which are used in perfumery and medicine.

66. Acorus calamus.

Vasampu.

Fam: Araceae.

These herbacious plants are cultivated for their tubers which are considered to be aromatic, tonic, stomachic and antidote for various poisons.

67. Aloe barbedensis.

Kattavāla.

Fam: Liliaceae.

It is tonic, purgative and emmenagogue. The juice of the leaf is used in the preparation of cooling oils for the head.

From very remote ages the spices of Southern Asia have been an attraction for adventurous explorers. Malabar with its cardamoms, ginger, nutmeg, Spices, condiments, turmeric and pepper has been the centre of and seasoning trade even from the time of the Romans. herbs. For a very long period the world's supply of spices came from the wild growths in their natural habitat. The increase in demand tempted people to take to the cultivation of spices. The extensive cultivation of the spices was for a pretty long time restricted by the system of State monopoly established by the Dutch Government in the principal centres of production. According to one authority. the Dutch law in regard to spice cultivation was so severe that the offence of cultivating the plants on private lands

or the destruction of plants belonging to the Government was punishable with death.

The uses of spices are manifold. Most of them possess medicinal properties and are therefore considered by the physicians as very valuable. In the culinary art they play a very important part in that they make even bland or unpalatable articles of food very agreeable to taste. Spiced dishes stimulate the secretion of internal digestive fluids and are therefore very useful. They also possess antiseptic and preservative properties. Spices are indispensable to the confectioner as well. The following are the important spices grown in Travancore:—

1. Elettaria cardamomum.

Élam or Élakkāi, cārdamom.

Fam: Zingiberceae.

The seeds are aromatic and are used in confectionery in the preparation of curries and in medicine. In the east they are used with mastificatories for sweetening the breath and in fact they are very widely used in Hindu festivals and ceremonials.

2. Piper nigrum.

Kurumulaku-Black Pepper.

Fam: Piperaceae.

The black and white pepper seen in the market is obtained from the same plant. The berry of the pepper vine when dried in the sun furnishes the black pepper of commerce. The seed, after the skin of the fruit is removed, furnishes the white pepper of commerce.

All the parts of the plant are used in medicine. The root is considered to be tonic, stimulant and cordial, and with honey it is believed to be a cure for cough, asthma, worms, fever, phlegm, and rheumatism. The fruit is an antidote for arsenic. It is useful in paralysis, throat complaints and indigestion.

Piper longum.

Tippali—Long Pepper.

Fam: Piperaceae.

This is a creeper which grows in the evergreen forests of the State up to an elevation of 3,000 feet. The leaves, stem and roots are used in medicine. The fruit is used as a condiment. The root is useful in paralysis, stiff joints and in epilepsy. The fruit is alterative, stimulant and tonic and is useful in cough, asthma, rheumatism fever and lung and throat troubles.

3. Piper betle.

Vettila-Betel-vine.

Fam: Piperaceae.

This is a perennial twining plant cultivated in the plains for its aromatic leaves, which are chewed with arecanut and lime with or without tobacco. There are three important varieties known in Travancore, viz., Ithām-valy, thulasi-vettilai and Venmani-vettilai. Pallipuram and Karappuram are the two other varieties grown in the State.

The leaves contain an aromatic essential oil called "chavicol" which is even stronger than carbolic acid. They are considered stimulant, tonic, and digestive. The leaves, warmed by fire and placed over breast, check the secretion of milk in nursing women.

4. Zingiber officinalis.

Inchi-Ginger.

Fam: Zingiberaceae.

This is a herbaceous plant which grows up to a height of about eighteen inches. The underground tuberous stems when dried furnish the ginger of commerce. The "hands" or rances at the rhizomes are exported in two forms, the "peeled" and the "unpeeled" ginger.

This is useful in diarrhoea, chest-pain, cough, rheumatism, fever, facial neuralgia, indigestion and even in cholera. Dried ginger is commonly used as a condiment,

5. Curcuma longa.

Manjal-Turmeric.

Fam: Zingiberaceae.

The juice of the fresh rhizomes is anthelmintic. Rubbed into a paste it is useful in sore eyes and chicken-pox. It is stimulant, aromatic, tonic and carminative. It is used as an external application in diseases of the skin caused by impure blood.

A variety of curcuma with the smell of mangoes, called "manga inchi"—meaning mango ginger—is cultivated in certain places. This is used in making pickles and chutnies.

6. Cinnamomum zeylanicum.

Karuva or Valana-The Cinnamon tree.

Fam: Lauraceae.

Almost all parts of the tree are aromatic. The bark yields the cinnamon bark of commerce, though it is not collected in Travancore. The bark and leaves yield an essential oil which is largely used in medicine and perfumery. The wood is used for rough planking.

7. Eugenia caryophyllata.

Krāmp or Grāmpu-The clove plant.

Fam: Myrtaceae.

This is a native of the Moluccas. It is a small conical tree which grows up to a height of thirty feet. In Travancore this is an introduced plant and is seen in certain plantations here and there. The cloves are the dried unexpanded flower buds of the plants. They are considered as light, cooling, stomachic, digestive, tonic, alexipharmic and cephalic. They are also useful in thirst, vomitting, cold and flatulence. A kind of oil is expressed from them which is used in medicine.

4. Myristica fragrans.

Jāthikkā—Nut-meg.

Fam: Myristicaceae.

This is a moderate-sized tree which is cultivated in the plains for its seeds and arillus. They are considered to be stimulating, narcotic, tonic, digestive and approdisiac. They are also useful in the obstruction of liver and spleen. Oil of mace is also possessed of the above properties. The bark of this tree is considered to be astringent.

5. Capsicum species.

Mulaku-Chillis-Red pepper.

Fam: Solanaceae.

These are small shrubs or herbaceous plants cultivated throughout the State for the sake of their pungent fruits. The fruits are used in curries, pickles and sauces as well as in medicine. They are possessed of stomachic, stimulant and rubefacient properties.

6. Allium cepa.

Chuvannulli-Venkāyam-Onion.

Fam: Liliaceac.

It is cultivated in the drier regions of Travancore. There are two varieties of onion cultivated, the red and the white. It is largely used as a condiment. It is diuretic, stimulant and expectorant.

7. Allium sativum.

Vellulli or Vellapundu-Garlic.

Fam: Liliaceac.

This is also cultivated in the drier regions of Travancore for the bulbs which are medicinal. It is used in curries and as an ingredient in several medicinal preparations. It is useful in rheumatism, asthma, sore throat, paralysis, facial paralysis, gout, worm troubles and indigestion.

8. Coriandrum sativum.

Kotthamally, Kotthampālari-Coriander.

Fam: Umbelliferac.

This is a herbacious annual. It is commonly cultivated in the kitchen gardens as a seasoning herb. The tender leaves are used for flavouring soups, chutnies, sāmbārs, and other curries. It is aromatic, stimulant, carminative and digestive. A decoction of the seeds with milk and sugar is given for bleeding piles.

9. Cuminum cyminum.

Jīrakam--Cumin.

Fam: Umbelliferae.

This is not extensively cultivated as a principal crop but it is by no means rare in the dry regions of Travancore. This is used as a condiment in curries. It is considered to be cooling, aromatic, carminative, antibilious and stomachic. It increases the retentive power in men and is administered in gonorrhoea.

10. Peucedanum graveolens.

Chathakuppa—The Dill plant.

Fam: Umbelliferae.

The plant is grown mainly for its seeds which are used in the preparation of Dill Oil and Dill Water both of which possess medicinal properties. The plant itself is used as a vegetable. It is carminative and is therefore used in all abdominal complaints. It is applied externally in gout.

Mentha species.

Karivēppila.

The karileaf tree, (Murraya, koenigii) and Sambharapullu (Cymbopogon species) are also used in flavouring curries.

1. Cocculus hirsutus.

Kāttukodi or Jalam thiratti.

Fam: Menispermaceae.

This is a bushy, woody climber with pubescent leaves, found straggling over bushes in the drier regions. The root

Plants of Special Interest. of this plant is alterative and is a good substitute for sarsaparilla. A decoction of the root with long-pepper in goat's milk is used in the treatment of rheumatic and old It is considered to be heating. laxative and

venereal pains. It is considered to be heating, laxative and sudorific. The leaves are believed to be possessed of the property of coagulating water into a green, jelly-like substance; hence the vernacular name "jalam thiratti." It is also believed that the leaves of this plant are commonly used by 'sādhūs' in the belief that they can sustain life for a long time without other articles of food. This may probably be due to the fact that the cooling property of the leaves does away with the active katabolism in the human body. This is of immense use to the recluses who lead a life of penitence in the wilderness.

2. Calycopteris floribunda.

Pullanji.

Fam: Combretaceae.

This is a diffuse, straggling shrub, often of climbing habit, which is generally seen in the deciduous forests and along water-courses. A paste of the root with that of Croton oblongifolium is applied in cases of bites of the 'Phursa' snake. The fruit is used in the treatment of jaundice. An oil prepared by boiling the ground leaves of this plant is used in the treatment of ulcers, while the decoction of the leaves in water is used as a gargle in ulcers on the tongue.

The tender twigs of the plant when cut give out a drinkable fluid which is of immense use to people who wander in the forests when they feel thirsty. This fluid is also medicinal.

3. Antiaris toxicaria.

Arei-anjili-The Upas tree.

Fam: Moraceae.

This is a very lofty deciduous tree which grows up to a height of 150 to 250 feet and a diameter of 5 feet. It is commonly seen in the evergreen forests up to 2,000 feet above sea level. The wood is soft and perishable but is useful in the manufacture of tea-chests, match boxes, splints, and paper-pulp. Sir George Watt writes about the tree thus:—

"The Indian tree was at one time supposed to be distinct from the Upas tree of Java on account of its innocuous character, but it is now generally admitted by Botanists that the two trees are the same. The milk of the Upas tree contains an acrid, virulent poison called "antiarin," which is used in Java for poisoning arrows but its properties do not seem to be known in India. Some writers state that the effluvium of the juice, especially when a tree is felled, causes a kind of cutaneous eruption, but I have never heard of such a thing in Travancore. The poisonous properties of the juice have given rise to exaggerated accounts of the fatal effects produced by the tree. It has been said that the effluyium kills all animals and birds which approach it, that no fish are to be found in the waters in its neighbourhood and lastly, that any attempt to collect the juice is almost certainly followed by the death of the operator."

The inner bark of this tree gives a very good fibre. The bark is used to make sacks, bags and "maravuri.". To make "maravuri", trees of suitable sizes are felled and then cut into lengths of from one to three feet. The bark is then carefully beaten with a wooden mallet. The beaten out bark separates out during the process and is then rolled back and removed from the wood. The bark thus prepared is used by the hill tribes for covering the body. The "sādhūs" who live in the wilderness and who have no access to ordinary clothings make use of this prepared bark for covering their bodies. This tree is therefore called "Valkalavriksha" in Sanskrit.

The powdered wood of this tree is boiled with kanji and given in bloody diarrhoea.

4. Memecylon edule.

Kāśāvu.

Fam: Melastomaceæ.

This is a small tree which is generally found in hilly tracts and evergreen forests up to 3,000 feet above sea level.

An infusion of the leaves of this plant is used as an astringent collyrium in conjunctivitis. A decoction of the root is given in menorrahagia. The leaves are used in the Deccan as a sure remedy for gonorrhoea.

The hill tribes, when making protracted tours in the jungles, collect the leaves of this plant and chew them in the belief that they will remove fatigue and give sufficient vigour.

5. Phyllanthus niruri.

Kīļā-nelli.

Fam: Euphorbiaceæ.

This is an annual herb which is found growing all over the country. The plant is used in medicine. It is considered to be deobstruent, diuretic, astringent and cooling. This is ground, mixed with milk and administered to jaundiced persons. It is useful in the treatment of genorrhoea.

The leaves of this plant are generally used by the country magicians to grind glass pieces to powder in their mouths with impunity. It is also believed that pure sand treated with these leaves gets melted soon.

6. Alangium Salvifolium.

Ankolam or Alinjal.

Fam: Alangiacea.

This is a small tree which is found in the drier regions of Travancore. The branches of the tree are armed with spines. The tree flowers in March and the fruits ripen in June. The wood can be used for various purposes but is not made use of in Travancore.

The seed, and the bark of the root are used in medicine. In some places the fruits are eaten. The seeds yield an oil.

This tree is believed to be possessed of rare occult virtues. It is also believed that it ceases to possess these virtues when it is touched by weapons of iron. When it is in bearing condition, the ground at the bottom of the tree is swept and dusted with a layer of holy ashes. The general belief is that out of the myriads of fruits that the tree produces one is supposed to be possessed of supernatural powers. This fruit, unlike the other fruits, has the capacity to go back to its original stalk after falling on the ground. The ashes dusted on the floor will get smeared on the pericarp of the fruit and the detection of the fruit with supernatural powers is thus made possible. This fruit is collected with all care and preserved. It is believed that many wonderful feats could be performed with the help of this fruit. The Indian magicians prepare an oil from the seeds of this tree, which is believed to possess several occult virtues.

7. Actiniopteris radiata.

Mailūchikam.

Fam: Filicincæ.

This is another interesting plant. Most of the magicians keep a stock of the dried plant which when put in water assumes its original shape and green colour. It is believed that if two pestles are carefully kept balanced parallel to each other and at right angles to the body of the operator, and if this mysterious plant is squeezed and placed in the centre in between the two pestles, they swing and knock each other.

8. Glycosmis cochinchinensis.

Pāṇal or Pānchi.

Fam: Rutacece.

This plant possesses rare virtues. The 'Y' shaped twigs are generally used by waterdiviners in fixing the place where the water table is nearer to the surface.

9. The Drosera.

There are three species of Drosera met with in Travancore. These plants are provided with devices for capturing small insects. The insects thus captured are retained till they are completely digested and absorbed. These plants, though they are insectivorous, are provided with chlorophyll and are therefore capable of living autotrophically. The leaves are covered with outgrowths which excrete the digestive fluid necessary to digest the insects captured by the plant. The insects that come in contact with any of the tentacles on the leaf are disabled by the sticky digestive secretion. In their ineffectual struggle to disentangle themselves they are more securely held. By haptotropic movement the other tentacles also curve over the captured insects and keep them securely held till the flashy matter of their bodies is completely absorbed. Of the three species found in Travancore one (D. peltata) is believed to possess medicinal properties. A paste made of the plant is used in the preparation of "thanka bhasmam" which is given as an antisyphilitic, alterative and tonic. D. indica and D. burmanni are the two other species of Drosera found in Travancore.

10. The Bladder-worts.

There are ten species of *Utrici laria* as yet described in Travancore. These plants generally grow in stagnant water. The leaves are divided into small segments which are mostly metamorphosed into small bladders. The mouth of the bladder is protected by an elastic valve which opens only inwards. Small crustaceans and other animalcules find their way into the trap, but they are prevented from going

out. The small insects thus caught are digested and absorbed; the latter function is being performed by forked hairs which spring from the inner wall of the bladder.

Most of our Bladder-worts commonly occur as weeds in the paddy fields (Virippu).

11. Desmodium gyrans.

"Tholukanni" or Rāma nāma paccha".

Fam: Papilionaceæ (Leguminoseæ).

This is a small under-shrub with interesting features. It is believed that the leaves are capable of making conscious response to the incantations of "Rāma mantra". This is a member of the family Leguminosæ and, like other members of family, this plant possesses peculiarly constructed pulvinus which makes it possible for the lateral leaflets to move in a singular fashion.

12. Ammania baccifera.

"Nīrmēlneruppu".

Sanskrit writers call the plant "Agnigarbha", meaning "the plant pregnant with fire". It possesses a strong muriatic smell and extremely acrid properties. It is used by the physicians of this country to raise blisters in rheumatism and fevers. The juice of this plant when sprinkled on water gives rise to a faint cloud probably of moisture. This may be the reason why the plant is called "Nîrmēlneruppu".

13. Holigarna arnottiana.

Chāru.

This is a moderate-sized tree which is commonly seen in Central and North Travancore, especially along the canals and river banks. The black juice obtained from the trunk and the rind of the fruit is acrid and is possessed of blistering qualities. It is used for giving a water-proof coating to boats and for various other purposes. The poisonous

effluvium of the tree causes cutaneous eruptions on the bodies of people who approach it. The people thus affected are asked by the local physicians to go and implore the "Thānni" tree to remedy the evil effects of the wrath of the chāru tree. A careful study seems to have been made of the action of this effluvium on different individuals by the physicians of this country who are by the way astrologers also. It is believed that people born under certain stars are immune to the poisonous effects of this tree.

14. Jyöthi-vriksham.

Classical writers on medicine, alchemy and occultism hold that there is a tree that emits light in darkness. This tree, according to them, becomes visible at night even from a distance. It is believed to be possessed of rare occult virtues. Botanical descriptions of the plant on the lines given for other species is not available and, as such, the identification of this plant is found to be difficult. But the conception or belief need not necessarily be a figment of the brain. The "touch wood" the soft tissues of which are penetrated by the delicate threads of mycelia of certain fungi give out a bright phosphorescent light of some intensity. The mischievously-minded folk in this country use this even now as a material for frightening soft-hearted people.

Nîla Koduvēli is another plant about which much is spoken of. It is very much sought after by the alchemists.

The Pipul tree—Is very well known to all. It is considered sacred by the Hindus. It is the custom of the religiously-minded Hindus to take their bath early in the morning and then to go round the tree several times in a reverential attitude. The loosely attached leaves of this plant are ever in excitement and it is now believed by eminent scientists that the plant gives out ozone or some

other exhibitanting exhalation which is particularly helpful in giving long and healthy life to humanity.

To the Karivēmbu is ascribed several occult virtues. Making garlands of the fruits of this tree and putting them round the necks of children suffering from whooping cough is by no means a rare phenomenon in the country parts. The sanity of this procedure has to be scientifically explained.

The stems of the snake-like climber (Bauhinia anguina) are cut to convenient sizes to serve as walking sticks which are generally believed to be a safeguard against snake-bites.

The Thottavadi (Mimosa pudica) folds its leaves and assumes a sleeping position when disturbed. The Thandanari or Thandavadi (Biophytum sensitivum) is another interesting plant which also assumes a sleeping position when disturbed. The two plants mentioned are believed to be possess many secret virtues.

The few suggestions given here are just to excite the curiosity of enthusiastic research workers whose business should be to unravel the mysteries of these types.

Plants belonging to certain families are characterised by the presence of distinct poisonous principles. These plants have been used by primitive people Poisonous plants. for the purpose of poisoning or stupefying fish and for other purposes. In some places persons suspected of witch-craft or crime were in former days made to swallow parts of certain poisonous plants in the belief that if the person died from the effects of the poison he was to be considered guilty.

"The Derris fish poisons of Malaya and neighbouring countries are of particular interest on account of the extent to which they are now used in the commercial manufacture of insecticides. The use of Derris as an insecticide was practised in the east long before its appearance in Europe

and America. The Chinese market-gardeners in Malaya frequently make use of an infusion of the pounded root in water, which is sprayed over the plants or brushed over with a bunch of feathers". The seeds of the custard-apple, the 'Blumea' herb, and Vernonia are all useful in the destruction of vermin. Many of the plants given in the following pages are of potential economic value in that they may in time be put to some more profitable use.

1. Strychnos nux-vomica.

Kānjiram—Nux vomica plant.

The seeds of this tree yield strychnine and brucine both of which are powerfully poisonous.

2. Plumbago zeylanica.

Koduvēli-Lead-wort.

The succulent roots of this plant possess blistering properties. They are also very poisonous.

3. Nerium odorum.

Arali.

The leaves of this plant are poisonous to all quadrupeds and human beings. The root-bark and flowers are highly poisonous.

4. Mirabilis jalapa.

Nalu-many pushpam.

Four o'clock plant or Marvel or Peru.

The roots and seeds of this plant are poisonous.

5. Hydnocarpus wightiana.

Maravetty.

The fruits of this tree are used as fish-poison. But the fish thus caught are unfit for human consumption. The oil mixed with milk is a fatal poison when taken internally.

6. Cerbera manghas.

Othalam.

This is a small tree the bark of which is a drastic purgative; the milky juice is highly poisonous.

8. Datura fastuosa.

Ummam.

The seeds of this plant are very poisonous.

9. Lasiosiphon eriocephalus.

Nangu.

The bark of this tree is a powerful vesicant. It is also used as a fish-poison.

10. Antiaris toxicaria.

Arei-ānjily—Upas tree.

This tree is supposed to give off an effluvium which is fatal to animal life. The milky latex of this tree contains a virulent poison.

11. Gloriosa superba.

Mēnthōnni.

This is a scandent shrub the tuberous roots of which are highly poisonous.

12. Euphorbia antiquorum.

Chathurakkalli.

The milky juice of this shrub is poisonous.

13. Euphorbia tirucalli.

Thirukkalli.

The juice of this tree is used in poisoning fish.

14. Anamirta cocculus.

Nanchenkuru.

This is a twiner the berries of which are used for poisoning fish and game,

The seeds contain 'picrotoxin', while the pericarp contains 'menispermine', both of which are poisonous.

15. Manihot utilissima.

Maracchiny.

This is cultivated as a food crop. Raw tuber, if eaten, causes prussic acid poisoning.

16. Jatropha grossypifolia.

Chuvanna kadalāvaņakku.

The seeds of these plants are poisonous.

17. Cleistanthus collinus.

The fruit, leaves and root of this tree are exceedingly poisonous. The bark is used to poison fish.

18. Aristolochia indica.

Garudakkodi.

This is a twining parannial which is sometimes used for illegal purposes.

19. Abrus precatorius.

Kunni.

The seeds of this climber are highly poisonous. The toxic action of the 'jaquirity' (Kunni seeds) resides in two proteids—a globulin and an albumose. Both these produce nearly the same effects, namely, local oedema and ecchymosis at the seat of inocculation, with ecchymosis in the serous membranes and gastro-enteritis, the blood in many cases remaining fluid. The general symptoms are a gradual sleepiness ending in coma, with rapid onset of rigor mortis.

20. Diospyros paniculata.

Karivella.

The leaves of this plant are used to poison fish,

Lobelia zeylanica. 21.

Kāttu pukayilai.

The seeds of this shrub are preferred to Datura as a They contain an 'acro-narcotic' poison. poison.

22. Randia dumetorum.

Malankari-Emetic nut.

This is a small tree which is found in the drier parts of the State. The unripe fruit is used in poisoning fish.

23.Elacodendron glacum.

Karuvali.

The bark of this tree is a virulent poison.

24. Walsura piscida.

Pērillā piecha.

The bark and pulp of the fruit of this tree act as efficient fish-poison.

26. Anona squamosa.

Athichakkai.

The seeds of this small tree contain an acrid principle which is fatal to insects. The fruit of A. reticulata, is also considered to be a vermifuge.

Herbal antidotes to poisons.

1. Ipomoea sepiaria.

The juice of this climber is used as an antidote for arsenic poisoning.

2. Ipomoeo aquatica.

The juice of this plant is used as an emetic in cases of arsenical or opium poisoning.

3. Aristolochia indica.

Garudakkodi.

This twining perennial is an antidote to snake-bites and bites of poisonous insects.

4. Zanonia indica.

The fresh juice of this climbing plant is used as an antidote for the venomous bites of the yecko.

5. Terminalia paniculata.

Maruthu.

The juice of the flowers of this tree mixed with that of guava bark is given as an antidote for opium poisoning.

6. Acacia arabica,

Karivēlam.

The tender leaves of this tree are pounded and given in ourd as an antidote for arsenic poison.

7. Butea frondosa.

Plaśu.

The bark of this tree is given with ginger in snakebite poisoning.

Butea superba. The roots of this climber are used in the treatment of the bites of poisonous animals.

8. Erythrina stricta.

Murukku.

The flowers of this tree, given in honey, serve as an antidote for poisons.

9. Elacodendron glaucum.

Karuvali.

The root of this tree is a valuable specific in snakebite poisoning.

10. Hugonia mystax.

Mothiram Kāppi.

The root of this shrub is crushed and used as an antidote for snake-bite poisoning. The root-bark is also used as an antidote for poisons.

11. Grewia tiliaefolia.

Unnam or Chadicha.

The wood of this tree is powdered and given as an emetic in opium-poisoning.

Plant population of the rice lands.

Several hygrophytes and hydrophytes are seen growing in the rich rice fields. The important species met with in several types of rice-lands are:—

Cryptogamia-

Charophyta.

Fam: Characeæ.

Chara sp.—Vēpin pasy, Payal, Stone-worts.

This weed is found only in the alkaline fields of South Travancore. This is one of the dangerous weeds till now noted.

Filicales.

Fam: Parkeriacew.

Lygodium, flexuosum-Thi-pannal.

This weed is a special feature of the chërikkal fields. It twines round and strangles the plant.

Fam: Marsiliacea

Marsilia (quadrifida)—Nīr Kīra, Nālila Kīra.

This plant leads an amphibious life. It is generally found in wet lands.

Phanerogamia.

Angiospermæ.

Monocotyledonca.

Fam: Alismacece.

Wiesneria triandra. Generally found in the wet virippu fields.

Sagittaria guayanensis. This plant is a denizen of the water-logged localities.

Fam: Hydrocharitacca.

Vallisneria. There are two species of Vallisneria which are noted as weeds.

Hydrilla verticillata is very common in low-lying fields which are mostly under water.

Fam: Graminew.

This is a family which is very well represented in the arable and waste lands of the State.

Panieum Crus-galli-Kavada.

This is generally found growing in the punja fields in Nanjanad, Ampalapula, Karthikappalli and Thiruvella.

Panicum Colonum is a weed which is generally met with in rich soils.

Panicum trypheran. This is commonly met with in virippu fields of high elevation and in wet compounds.

Panicum interruptum. (Pothalu). Like Kavada (P. Crusgalli) this is also a very injurious weed.

Eleusine acgyptiaca is found only in high wet fields. It is very common in the chērikkal fields and is a good fodder plant.

Ischaemum citiarc. The grass which may be creeping or sub-erect is generally found in wet situations.

Leptochloa chinensis-Kuruthalam pullu.

This prefers very wet localities and is a trouble-some weed.

Digitaria sanguinalis, is exclusively a weed of the chērikkal lands.

Isachne miliacea—Vanjin pullu, Valary.

This is a very injurious weed. It is found in almost

all the wet virippu fields in the State. In South Travancore the weed is reported to be causing much trouble to the cultivators.

Fam: Cyperaceæ.

Species of this family are mostly rhizomatous and hence they are generally difficult for eradication.

Fimbristylis miliacea—Kōra, Kōran pullu.

This is a weed of the virippu fields.

Fimbristylis tetragona. This is found in wet virippu fields.

Eleocharis atropurpurea is found in wet virippu fields.

Eleocharis fistulosa—Chelly, Kethira.

The presence of Kethira is a prominent feature of the punja fields in Ampalapula and Karthikapally.

Fuirena glomerata. This plant grows in almost any wet field, and even in water, almost to a depth of two feet.

Scirpus juncoides—Mutty pullu.

This occurs in the wet high virippu fields.

Mariscus cyperinus. This plant is generally found in almost all the wet virippu fields.

Scleria caricina. This is a very common weed of the virippu fields.

Cyperus sp. This is generally found in almost all fertile paddy fields.

Cyperus sp. grows well in the higher wet fertile fields. Cyperus haspan. The plant grows well in the virippu fields.

Cyperus iria. The species may be seen in almost any of the wet virippu fields.

Pycreus pilosus—Kūda-pidippan. Kūda-pidippan is a troublesome weed to the cultivator. Fam: Araceæ.

Fam: Eriocaulaceæ. Eriocaulon truncatum.

Eriocaulon intermedium and Eriocaulon sieboldianum. These are moisture-loving plans. They are found in the virippu fields.

Fam: Commelinacea.

Aneilema spiratum.

Aneilema nudiflorum and

Cyanotis axillaris are also found in the wet virippu fields.

Fam: Pontederiaceæ.

Almost all the species are water-loving plants. They grow in water-logged localities.

Monochoria vaginalis and

Monochoria plantaginea generally grow in the low virippu fields. They are very common between 'Karkadagam' and 'Makaram'.

Dicotyledoneae.

Fam: Amarantacea.

Alternanthera sessilis-Koluppa.

Koluppa is a very common weed in the fields.

Fam: Capparidaceæ.

Cleome viscosa-Vela, Naivela.

This is exclusively a weed of the sesamum crop.

Fam: Leguminosæ.

Geissapsis cristata—Vettila Kettu.

A common weed of the Virippu fields.

Aeschynomene indica—Kidēśu and Aeschynomene aspera—Kidēśu,

Fam: Euphorbiacew.

As a weed *Phyllanthus miruri* (Kilukā nelly) is met with in chērikkal fields only.

Fam: Tamaricaceo. Bergia verticillata.

This is generally found in the wet virippu fields of Travancore.

Fam: Turneracea.

Fam: Onagracea. Ludwigia parviflora.

A very tenacious weed found in the wet fields of Travancore.

Fain: Boraginacea.

Heliotropium indicum.

Nāyaly Thekkada, Ellintay aliyan.

and Coldenia procumbens, are weeds found in the sesamum crop.

Fam: Scrophulariacea.

Microcarpaea muscosa, is an annual spreading herb which is very often found in the wet Virippu fields.

Striga lutea -- Maram.

Maram is the one of the few injurious weeds of the country. It is not very common in the fields of the plains, but is found commonly occuring in the Chērikkal lands. The plant is a parasite. It develops haustoria which suck in nourishment from the roots of the paddy plants that happen to grow in its neighbourhood. The plant Thiduvan which is reported to have caused damage to the ragi crop at Quilon and other places may in all probability be identically the same,

Limnophila gratissima—Kula-chira.

Limnophila racemosa.

Limnophil a gratioloides-Marga Nary and

Limnophila conferta are very connen in maisly situations, while

Ilysanthes hyssopioides.

Bonnaya brachiata and

Vandellia scabra are common weeds of the moist Virippu fields.

Fam: Lentibulariaceæ.

Utricularia reticulata Ōṇa pūvu, Nellil pūvu, Vayalil Kākka pūvu, etc.

This is exclusively a weed of the wet virippu fields. The plant is a prolific seeders.

Utricularia flexuosa and Utricularia exoleta.

These are also seen in some virippu fields.

Fam: Rubiacea.

Oldenlandia corymbosa.

This is commonly found in the moist Virippu fields.

Fam: Campanulaceae.

Lobelia trigona.

This is found in the moist virippu fields.

Fam: Compositor.

Epaltes divaricata.

This is generally found in the wet virippu fields.

Eclipta alba-Kaiyonni, Kanjunny.

This is seen in moist fields also.

Detailed information regarding the plant may be obtained from the Rulletin on the same published by the Agricultural Department.

Vernonia Cinerea—Pūvān Kurunthal, Vēna paccha, It is a weed generally found in the chērikkal fields of Travancore.

Soil-erosion is causing a lot of havoc to the cultivator in Travancore. The unprotected banks of swift rivers are often eroded and the soil thus eroded is deposited in another place, thereby changing the course of the river. In some places fertile, cultivable areas are often made unproductive by the deposit of eroded coarse soil material carried by rivers and small streams.

Disafforestation is a potent factor in determining the amount of soil matter eroded during the year. According to John A. Widtsoe, "Rivers rising in well-forested districts or those that travel only a short distance before they empty into the lake or main river, are often comparatively free from suspended matter................When the immense volumes of water in such rivers are considered, it is readily understood that quantities of suspended matter, almost beyond human comprehension, are carried from the highlands, tributary to the river, during each season's flow. Large rivers, all over the world, carry similar loads of suspended matter".*

Several tons of fertile alluvial matter from the soil are being carried away by streams to silt up the lagoons. The cultivable hilly tracts of this country are now unscientifically cultivated. They are not properly terraced and the few terraced areas are not always properly kept secure by introducing effective sand-binding species of plants.

The condition of the sandy coastal belt is by no means better. The strong blows of wind very often distort the natural contour of the land. The loose sand in one place is carried away by the strong wind prevailing in that region and deposited in another place, thus giving the area an itinerant surface soil on which no reliance could be placed.

^{*} Principles of Irrigation Practice by John A. Widtsoe,

The bunds of channels that irrigate the fields are also very often eroded giving annoyance and untold loss to the cultivator.

A lot of protective campaign could be arranged by introducing in the affected areas plants that have the quality of binding the soil-particles together.

The sand or bank-binding plants sometimes afford sufficient quantity of valuable fodder for cattle. They also make it possible for other economic plants to grow in those places.

The following are some of the principal species of sand or bank-binding plants met with in the State.

- 1. Calotropis gigantea—Erukku. This is commonly seen near the sea coast, and is also seen in Nānjanād as a wild growth on the banks of canals.
- 2. Spinifex squarrosus. This is a Xerophytic grass seen almost everywhere on the sea coast.
- 3. Scaevola koenigii. This is a shrub with pithy stem. It is found on the sea coast.
- 4. Pandanus odoratissina -- Kaitha or Thala -- Screwpine. It is an interesting bushy growth on the sea shore.
- 5. Ipomoea digitata. This scandent herb is found on the sea shore.
- 6. Ipomoea pes-tigridis. This is found growing on the sea coast.
- 7. Ipomoea biloha. The "Goat's foot convolvulus". It grows on the sea coast and is an efficient sand-binder.
- 8. Launea pinnatifida—Kadal koluppa. This is one of the principal sand-binding plants of the sea coast.
- 9. Cyperus bulbosus. This is a cyperaceous plant found growing on the sea coast.
- 10. Hydrophyllax maritima. This plant is commonly seen on sand dunes on the sea coast.
- 11. Andropogon squarrosus—Rāmaccham. This grass is generally cultivated on the banks of channels and tanks. The plant is an excellent sand-binder.

- 12. Hibiscus tiliaccus Attuparuthy or Nirparuthy. This plant grows on the banks of tidal rivers. It is also planted to protect the banks of swift rivers.
- 13. Panicum repens—Inchi pullu. Its growth on the banks and field bunds is generally encouraged.
- 14. Cynodon dactylon—Belikaruka or Arukanpullu. This is a perennial species found growing all over the country.

Species of Saccharum, Ochlandra, Oxytenanthera and Cassia are generally planted on the banks of streams and rivers. The sensitive plants, Desmodium and Digitaria are also useful as sand-binders in loose sandy soils. It will be advantageous if the purposes of fodder and sand-binding are combined, as in that case it would solve another much-vexed problem—that of finding fodder for the cattle of the State.

Plants add to the charm of the gardens. They cater to the aesthetic taste of man. The plants in a garden may be ordinary ornamental foliage plants, flower-ing trees, shrubs or even herbs. These plants often serve to break the monotony of the natural situation and thus exert an influence which is at once exhibitating and pleasant. They often appeal to one or more of our senses.

Situated as it is in the tropics, Travancore possesses a wealth of rare ornamental plants well suited for this purpose. Recently, however, we find a lot of exotic species also introduced into our gardens.

The following are some of the important species met with in our gardens:—

I. Plants with showy or scented flowers.

1. Michelia champaca.

Champakam.

This tree is highly venerated by the Hindus and is therefore generally planted in the 'nandavanams' attached to the temples. The flowers are sweet-scented.

2. Mesua ferrea.

Nangu—The Iron wood.

This is a moderate-sized, handsome, conical tree possessing large white flowers with bundles of yellow stamens. The flowers are delicately scented.

.. 3. Millingtonia hortensis.

Maramally.

This tree produces a profusion of long, pure, white fragrant flowers.

4. Plumeria actuifolia.

Elacchampakam--The Pagoda tree.

This produces large corymbs of white, fragiant flowers during the dry seasons.

5. Nyctanthes arbor-tristis.

Pavilamally.

The small tree produces sweet-scented flowers which are used by the Hindus in the worship of their gods.

6. Lawsonia inermis.

Mylanchy or Maruthonni-The Henna Plant.

The flowers are sweet-scented.

7. Murayya exolica.

The China-box plant.

This is a small graceful tree. It possesses a deep green foliage and flowers which are pure white in colour and are sweet-scented.

8. Bauhinia species.

Manthāram.

Most of the plants belonging to this genus possess large showy flowers and they are therefore planted in gardens. The "Veluthamanthāram" (B. acuminata) with large

fragrant flowers and the "Chuvanna manthāram" (B. Variegata) which produces beautiful purple flowers are frequently met with in our gardens.

9. Butea frondosa.

Plāśu or Chamatha.

In the dry months this tree produces a large number of scarlet coloured flowers.

10. Cassia fistula.

Kani konna or śaral konna.

The large pendulous racemes of bright yellow flowers of this tree are largely in demand on the "Vishu" day.

11. Hibiscus rosa sinensis.

Chemparathi.

This small shrub is cultivated in the gardens for its large, beautiful bell-shaped flowers which may be single or double. Of the cultivated varieties, plants producing crimson, yellow, sandal wood and white coloured flowers are the common ones.

12. Ixora coccinea.

Thetti.

There are several ixoras which are planted as ornamental plants. Plants producing white cream or red flowers are the most common forms met with in the gardens.

13. Ervatamia coronaria.

Nanthiārvattam.

Two varieties of "Nanthiarvattoms" are met with in the gardens. These plants are small under-shrubs which produce beautiful white flowers possessing very delicate and agreeable fragrance.

14. Erythrina indica.

Murukku.

This small tree produces large, showy, scarlet flowers. There is another rare variety producing white flowers.

15. Mussaenda frondosa.

Vellila.

This shrub produces small, orange-coloured tubular flowers which are made conspicuous by the enlargement of one of the calyx lobes of the flowers. The enlarged calyx lobe possesses a white colour which shows up the small orange-coloured flowers.

16. Saraca indica.

Asōkam.

This small tree possesses a deep green foliage. It produces huge heads of bright orange-coloured flowers.

17. Caesalpinia pulcherrima.

Rājamally-Peacock flower.

This shrub produces showy flowers which may be bright-yellow or scarlet in colour.

18. Nerium odorum.

Arali.

This shrub is cultivated in the 'nandavanams' for its showy, pink or white flowers. The roots are poisonous. This plant is extensively cultivated in South Travancore where there is great demand for its flowers.

19. Mirabilis jalapa.

Nālumaņipū—The Four o'clock plant.

This is a large herbaceous plant which is cultivated in the gardens. It possesses flowers of various colours.

20. Vinca rosea.

Kasitthetty-Periwinkle.

This plant produces pinkish or white flowers,

21. Jusminum grandiforum.

Picchakam.

The plant produces white, fragrant, tubular flowers. It is cultivated in the gardens and nandavanams.

There are several varieties of 'rose' cultivated in the gardens. The 'Teas', 'Noisettes' and the 'Bourbons' are specially suited for the plains, while there are varieties mainly intended for the hills. Climbing roses suitable for trailing on arches, fences, etc., are also commonly met with in the plains. The several varieties are distinguished by their colour and scent.

Bougainvillaea speciabilis with its crimson-coloured flowers is also commonly seen in the gardens either as a trailing plant or cut back to form a shrubby growth.

Ecbolium linneanum, several species of Duranta, Clerodendron, Canna, Chrysanthemum and Celosia are commonly cultivated as ornamental plants.

Helianthus annus, Hippeastrum, Cereus grandiflorus, Cosmos bipinnatus, Gynandropsis, Tecoma stans species of Crotalaria, Memecylon and Quassia amara are also grown in some of the gardens.

II. Ornamental Foliage Plants.

1. Cycas circinalis.

Kananga or Chananga maram.

This plant bears a crown of long, pinnate leaves which are used for the purpose of decoration on festive occasions. It is planted as an ornamental foliage shrub.

2. Pandanus.

Several plants belonging to this genus are cultivated in the gardens, some for their sweet-scented bracts and others for their handsome variegated leaves.

3. Ravenala madagascariensis,

Travellers' tree,

This is a plant of peculiar growth possessing leaves which are distichously arranged on the stem. The tree stores up water in the receptacles formed at the base of the leaves.

4. Terminalia catappa.

Thalli thenga.

This is a small, spreading, deciduous tree with large leathery leaves and fruits the kernel of which is eaten.

5. Casuarina equisatifolia.

Kāttādi maram.

In windy situations the plant produces a pleasing whistling sound.

6. Dillenia indica.

This tree possesses large, peculiarly veined, serrate leaves. It is a good foliage plant for the garden.

7. Adathoda vasica.

Ādalodakam.

This is an ornamental hedge-plant.

Numerous species and varieties of Binoma, Anthurium, Caladium, Alocacia and Coliacum are seen in almost all the gardens in the country.

Caryota urens, Areca catechu and other forms of feather-leaved palms are grown for ornamental foliage. Species of *Phoenix*, Calamus, Orcodoxa and several species of fanleaved palms are also cultivated for ornamental purposes.

Species of Adiantum, Asplenium and Sclaginella are some of the Cryptogamic plants planted for the beauty of their foliage.

Species of Araucaria, Cupressus and Thuja are other ornamental foliage plants found in big gardens.

Clitoria ternatea.

Śankhupushpam.

This is a common ornamental creeper in our gardens. The blue-flowered variety is by far the common form, while the variety with white flowers is rare.

Adapothian (Holostemma annulare), Antigonon leptopus, Antigonon albiflora, Asparagus, Gloriosa superba, Jasminum species, Passiflora, Naravelia zeylanica, Thunbergia grandiflora, several species of Aristolochia, Cardiospermum, Monstera, Raphidophora, Quisqualis indica, species of Ipomoea, different varieties of convolvulus, Allamanda Cathartica, Clematis and Bougainvillea are some of the ornamental creepers or climbing plants seen in our gardens.

Nymphaca lotus, N. Stellata, Nelumbium speciosum, Pistia stratiotes, Limnanthemum indicum, Monochoria and Aponogeton are some of the ornamental plants seen growing in the garden tanks.

Eichhornia is a beautiful floating plant with blue or lilac flowers. It has now become an obnoxious weed.

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CHAPTER V.

FAUNA.

Travancore belongs zoo geographically to the great Indo-Malay or Oriental Region, which includes the whole of India, Ceylon, Assam, Burma, Formosa, General. Hainan, Cochin-China, Malacca, Sumatra, Java, Borneo, the Philippine Islands and part of China. is divided into three sub-regions, Uisgangetic, Transgangetic and Malayan. The first of these comprises "India proper from the base of the Himalayas to Cape Comorin and from the Arabian Sea and eastern boundary of the Punjab tract to the Bay of Bengal and the hills forming the eastern limit of the Gangetic alluvium with the addition of the island of Ceylon". Travancore falls within these limits. It has, affinities in its hill-fauna with that of the however. Himalayas and the south-western hill-group in Ceylon, but they are not sufficient, says Mr. Blanford, "to enable the South Indian and Ceylonese areas to be classed with the Himalayan forest area in a separate sub-division or subregion". It has also affinities with the Malayan subregion as is shown by the occurrence of such genera as Loris and Moschiola among Mammals, Draco among Reptiles and Ixalus among Amphibians.

Travancore may be divided into four divisions: (1) The forest-clad hill range up to and including the Cardamom Hills with an average height of 4,500 feet. (2) The Kaṇṇan Dēvan Hills or High Range, more open in character and with an average height of 6,500 feet. (3) The low country from the north as far as Nāgercōil. (4) The low country south of Nāgercōil. Here the rainfall is only twenty five inches and the palmyra takes the place of the coconut palm. The fauna of this division resembles in general that of the east coast,

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Mammals.

About seventy mammals representing nine orders have been recorded from Travancore, none of which, however, are peculiar to this region.

Order Primates

Fam: Cercopithecidae—Old World Monkeys.
Three Macaques and two Langurs are found in Travancore.

Semnopitheous-The Langurs.

These are of slender build and have long limbs and very long tails. They are without cheek pouches and their stomach consists of three divisions, a complication similar to that of the ruminants. The langurs are almost herbivorous in their diet, feeding mostly on leaves and young shoots.

1. Semnopithecus johni-The Nilgiri Langur.

This langur is found in Travancore on the hills at elevations over 2,500 feet. It is usually found in small troops and the loud booming note of the male is a familiar sound in the hills. It is very gentle, easily tamed and clean in its habits in captivity. The body is dark, glossy, black and the head tawny. The flesh of this animal is believed to possess medicinal qualities and is in great demand among the lower classes of the people.

2. Semnopithecus priamus—The Madras Langur.

The head is pale brown above; the face, palms of hands and soles of feet are black. The back and tail are greyish and the lower parts pale brown.

Semnopithecus hypoleucus—The Malabar Langur. A greyish monkey with a black face is found in the Cochin Hills and in the Kambum Valley on the eastern slopes of the Cardamom Hills. It has not been actually recorded from Travancore, but it is likely that this species may also be found in this State.

Macacus—The macaques are more compactly built than the langurs and have large cheek pouches and simple undivided stomach. They eat insects, frogs, lizards, etc., besides vegetables and fruits. They cram the hastily swallowed food into their cheek pouches and masticate it at leisure.

1. Macacus silenus—The Lion-tailed Monkey.

This monkey is usually found in dense forests in small herds. It is sulky and savage in captivity. The head is surrounded with a ruff of long grey hair and the rest of the coat, the bare face and hands are black. The slender tail is tufted at the tip like that of the lion,

2. Macacus sinicus—The Bonnet Monkey.

This is the common monkey of South India and is found generally in the low country, not ascending hills to any height. It is a long-tailed monkey without whiskers or beard, but with flesh-coloured face and ears and a cap of radiating hair on the crown. The colour is brown above, paler below.

3. Macaous pileatus—The Toque Monkey.

This monkey, formerly believed to be confined to Ceylon, is found also in Travancore. In habits and in build it is very like the bonnet monkey, but generally smaller and slimmer. The face is flesh-coloured but the ears are dark.

Order Lemuroidea (Lemurs).

These look like monkeys but have fox-like faces. The thumb and the great toe are well developed and opposable. The fore-finger and the second toe end in sharp claw instead of a flat nail as the other fingers and toes. The tail is absent in Indian forms. There is only one representative of this order in Travancore.

Loris gracilis—The Slender Loris.

This is fairly common in the lowland forests of Travancore. It is not much larger than a rat and is very sluggish in its movements. The large eyes are set in a

Tigers.

dark patch and the body is clothed with very short and soft fur. When it sleeps, it doubles itself up bending the head down between its legs.

Order Carnivora.

This group comprises mammals that are familiarly known as beasts of prey, distinguished by the possession of special features for the capture and destruction of living prey. Their carnivorous dentition with well-developed strong canine teeth and the toes armed with strong and sharp claws point to their predatory life. The carnivores are divided into three sections all of which are well represented in Travancore.

| 1. | Acluroidea | (Cat section) |
|----|------------|----------------|
| 2. | Cynoidea | (Dog section) |
| 3. | Arctoidea | (Bear section) |

Aeluroidea.

Fam: Felidae.

1. Panthera (Felis) tigris—The Tiger.

Tigers are not uncommon on the hills of Travancore, but in the south where there is an abundance of forest and very little grass, they are comparatively rare.

2. Panthera pardus fusca (Felis pardus)—This is the Indian panther or leopard.

It is very common in Travancore. The tawny coat is marked with small close-set rosettes. The black variety is also common and is said to be bolder and fiercer than the ordinary one. The black panther is not a distinct species as the same parent may produce black and normal coloured cubs. The black colour is a case of melanism.

A hundred years ago the jungles were infested by tigers and leopards which often strayed into the country parts and took tolls of men and more of cattle. The Government used to send parties of soldiers for their

destruction. A system of prize money encouraged the more daring of the people to kill them. This along with the expansion of cultivation on the hills has reduced the number of tigers and leopards. But still they are quite common. The leopards are more numerous.

3. Felis chaus affinis (F. chaus)—The Jungle Cat.

This wild cat of India, very common in the low country, is only slightly larger than the domestic cat with which it is said to breed freely. The colour of its fur varies from sandy grey to yellowish grey and the tail is ringed with black towards the end. It feeds on small mammals and birds and attacks poultry when it gets a chance.

- 4. Prionailurus (Felis) bengalensis The Leopard Cat. This beautiful forest cat looking like a miniature panther is very common in the High Range of the State. It is about the size of a domestic cat but rather longer in the leg. The ground colour of the body is tawny yellowish above, white below, and marked throughout with black spots. It is nocturnal in habit and preys upon small birds and mammals.
 - 5. Prionailurus (Felis) rubiginosus The Rusty Spotted Cat.

This elegant little cat, about half or three quarters of the size of a domestic cat, is found in the low country but is not common. "It has a soft, smooth, fawn grey coat, patterned with brown bars and spots arranged in more or less regular lines". Like the Leopard Cat it is nocturnal in habit and preys upon small mammals and birds.

6. Prionailurus (Felis) viverrinus—The Fishing Cat:
This sulky and fierce cat, much bigger than the
domestic cat, occurs in Travancore about the neighbourhood
of backwaters. "Short and stout, its body is covered with
short, coarse, earthy grey fur, infused with brown. The
body markings consist of a series of elongate black spots
arranged in more or less longitudinal rows. The lower
parts of the body are spotted and the tail is more or less

distinctly ringed with black". It feeds on fish and freshwater molluses and also on any bird or mammal that it can secure.

Fam: Viverridæ.

This family is represented by two true civets and two palm civets.

True Civets.

- 1. Moschothera (Viverra) civettina—The large Malabar Civet.
- 2. Viverricula indica indica (Viverricula malaccensis)—The small Indian Civet.

Both these civets are kept under domestication for the sake of the "musk" secreted by a gland under the tail. The gland is present in both sexes and lies just in front of the testes in the male and in the corresponding position in the female. The secretion is used both for perfumery and for medicinal purposes.

Palm Civets.

1. Paradoxurus hermaphroditus (P. niger).

This is the common palm civet or toddy cat. It is called toddy cat because of its fondness for toddy. This cat, like other palm civets, is largely fruit-eating though it feeds also on small birds, insects, etc. It is a perfect pest in houses and takes up its abode between the roof and ceiling where its noisy movements and offensive smell make it an undesirable tenant.

2. Paradoxurus jerdoni—The brown Palm Civet.

This is confined to the hill ranges of Travancore above 3,000 feet. It can be distinguished from the common toddy cat by its rich, deep brown colouring, the back and sides being somewhat grey. It is nocturnal and feeds on fruits, though it is not above taking a meat diet when it can get one.

Fam: Herpestidæ-Mungooses.

Mungooses have no perfume glands but possess anal glands which secrete a foul smelling liquid. Their long weasel-like bodies, tails bristling with long hair and the pointed muzzle are characteristic. Three species occur in the State.

1. Herpestes edwardsi carnaticus (H. Mungo.)

The common mungoose of South India. It is found everywhere in the low country. The general colouring is dark steel-grey, finely speckled with deep brown. The animal is diurnal in habit and preys upon rats, mice, frogs, lizards, snakes, etc. It is somewhat immune to snake venom, though not absolutely so, as is commonly believed. It is easily tamed and makes a charming pet.

2. Herpestes fuscus—The Nilgiri brown Mungoose.

This mungoose found in the hill forests of Travancore is about the same size as, or slightly larger than, the common mungoose, blackish brown in colour, more or less speckled with yellow or brownish white.

3. Herpestes Vitticolis—The stripe-necked Mungoose.

This is found only in the hill forests and is the largest of the three, in fact, the largest of all Asiatic mungooses. It is handsomely coloured with an iron-grey head and the body speckled with brown, yellow and red. The end of the tail is black. A very conspicuous black stripe is present on each side of the neck. It has very strong claws by means of which it digs out its prey from the ground.

4. Herpestes fulvescens—The Ceylon brown Mungoose.

This has also been recorded from Travancore. It is likely that this is only a race of *H. fuscus*.

Fam: Hyaenidæ.

Hyaena hyaena-The Striped Hyæna.

This was once common in Travancore but appears to be extremely rare now.

Cynoidea.

Fam: Canida.

1. Canis indicus (aureus)—The Jackal.

The jackal is the commonest nocturnal animal in Travancore. Its diabolical yells at night are only too familiar. It is smaller than an ordinary pariah dog and has shorter ears and a bushy tail.

2. Cyon deccanensis (dukhunensis)—The Indian Wild Dog.

Packs of wild dogs occur in the hills, where they hunt and clear the place where they happen to be in of every kind of game. It is larger in size than the jackal, the ears are rounded and the tail more bushy. Teats are more than ten, which is the typical dog number.

Arctoidea.

Fam: Mustelida.

This family is represented by a single species, Mustela flavigula Var. Gwatkinsi—the Indian Marten or the White Cheeked Marten. This very attractive and active mammal is found commonly in Pīrmēde and the Cardamom Hills. It eats small mammals and birds and sometimes gives trouble by breaking into fowl houses.

Fam: Lutridæ-Otters.

The otters are aquatic mammals with a smooth glossy coat of coarse fur. The tail is strong and tapering, the muzzle broad, ears small and legs short with fully webbed feet provided with short claws. They live in holes by day and feed at night on fish and other aquatic animals. Two species are common in the backwaters.

- 1. Lutra vulgaris—The common otter.
- 2. Lutra macrodus—the smooth Indian otter.

This is shorter than the former but more stoutly built with shorter fur.

Fam: Ursidæ-Bears.

The Sloth Bear, *Melursus ursinus*, is found on the hills at all elevations and is much dreaded as it will attack man unprovoked. The body is covered with long, black, coarse hair, the mobile snout is grey and the lips are large and loose. Its food consists of fruits and insects. It is extremely fond of honey and white ants and will never pass an anthill without digging up its contents.

Order Insectivora.

The members of this order are small-sized, recognisable by their long pig-like nose and pointed dentition adapted for crushing insects. The order is represented in Travancore by a species of hedge-hog and three species of musk shrews.

Fam: Erinaceidæ-Hedge-hogs.

Erinaceus micropus--the South Indian Hedge-hog.

This is only found in the extreme south about Nager-coil. It hides in holes during the day and at night comes out and feeds on insects. When confronted by an enemy it rolls itself into a ball, presenting the spines at all points.

Fam: Soricidæ-Shrews.

These are so like rats that they are often mistaken for them. They are, however, easily distinguishable by their long snout, small eyes, rounded ears and comparatively short tail. The characteristic musky smell of the shrews is due to the secretion from a gland on each side of the body the opening of which is surrounded by short stiff hairs. Shrews are nocturnal and are helpful in keeping down insects. The three species found in Travancore are:

- 1. Crocidura caerulea, the common musk rat,
- 2. C. murina, the brown musk shrew and
- 3. C. perrotteti, the Indian pigmy shrew, one of the smallest of mammals.

Order-Chiroptera (Bats.)

This order has not been properly worked out in Travancore and more collecting is necessary both from the hills and from the plains. The more important of the families already recorded are mentioned below:

Fam: Pteropodide-Fruit eating Bats.

1. Pteropus medius—The Indian fruit-bat or the flying Fox.

This is the largest Indian bat. It is fox-headed with black wings about four feet in expanse and a body ten inches long. It is conspicuous everywhere by its habit of roosting on trees in large numbers.

2. Cynopterus marginatus — The small or short-nosed fruit-bat.

This little fox-bat has habits similar to the last and may be found roosting in large numbers on the folded leaves of plantains, palmyra palms and other trees.

Fam: Rhinolophidæ—The Horse-shoe Bats.

These have a complicated nose-leaf consisting of a leaflike process of the skin around the nostrils. The nose-leaf is an important organ of special sense akin to touch. The Rhinolophidæ are all insectivorous. Three species have been recorded: Rhinolophus āffinis, R. minor and Hipposiderus bicolor.

Fam: Nycteridæ—The Vampires.

Two vampires are known to occur in the State, Megaderma lyra (the Indian Vampire Bat) and M. spasma (the Malay Vampire). The former preys not only upon insects but also on small vertebrates such as frogs, lizards and even small bats.

Fam: Vespertilionida.

Among the Vespertilionids which are mainly insectivorous the following three species may be mentioned:—

1. Vesperugo abramus—The Indian Pipistrelle.

This is the commonest and the smallest bat in India. It hides in roofs, out-houses, etc., during the day and flies out at dusk, coming into rooms.

2. Nycticejus kuhli—The common yellow Bat.

This small common bat has the fur varying from greyish to yellowish brown above and white to yellow below.

3. Cerivoula picta—The Painted Bat.

This tiny handsome bat is "noticeable for its brilliant colouring—the wings, ears and tail web being orange, with broad deep wedges of black between the fingers". It looks more like a butterfly or moth on the wing than a bat.

Order Rodentia.

This order includes squirrels, rats, mice, porcupines, hares, etc. The members of this order are easily distinguished from all other mammals by the two large chisel-shaped incisor teeth in each jaw, followed by a long toothless gap. The incisors grow throughout life in adaptation to their hard use in the gnawing so characteristic of these animals. The order is well represented in Travancore.

Fam: Hystricidæ.—Porcupines.

Hystrix leucura—The common Indian Porcupine. s found only in the hills, where it lives in burrows

It is found only in the hills, where it lives in burrows and is very destructive to garden plants as its food consists chiefly of roots. "The hinder part of the back and upper flanks are covered with long sharp spines, so stiff and stout as to be used as pen-holders, and these grade off into shorter spines and hairs, while a few long thin bristle-like spines occur on the back. The tail is short and covered with short spines ending in a brush of peculiar quills with narrow roots and blunt open ends. These appear to act as a rattle and the quills rustle as the animal moves, for he fears enemies little, being an unpleasant animal to interfere with".

Fam: Leporidæ.—Hares and Rabbits.

Lepus nigricollis. The Black-naped Hare is common in the low country as well as on the hills. There is a conspicuous patch of black velvetty fur on the back of the neck.

Fam: Sciuridæ.—Squirrels and Flying Squirrels.

There are two species of Flying Squirrel and four species of squirrel in Travancore. The two flying squirrels are confined to the hills. In these the limbs of each side are united by a broad furry membrane extending from the wrist along the side to the hind foot. The membrane is supported at the wrist by a cartilaginous spur on the ulnar side. This membrane serves as a parachute to support the animals in the great flying leaps they make.

- 1. Pteromys oral—The large brown Flying Squirrel.
 This is the larger of the two, the head and body measuring about eighteen inches and the tail about two feet. It can easily make a leap of nearly sixty yards through the air. It feeds on bark and insects as well as fruits and nuts.
 - 2. Sciuropterus fuscicapillus—The small Travancore Flying Squirrel.

This somewhat rare squirrel is about half the size of the former. The fur is reddish brown above; the cheeks and under parts are nearly white.

3. Sciurus indicus—The large Indian Squirrel.

This large black and red squirrel is only found on the hills from an elevation of five hundred feet upwards. The colour is red and black and the tail is about as long as head and body. It nests high up on the trees and its loud cackling cry may be often heard in the forest.

4. Sciurus palmarum—The common striped squirrel or the Palm Squirrel.

This beautiful squirrel with three cream-coloured stripes all down the back is a familiar visitor to human habitations and its loud persistent chirrup is well known,

- 5. Sciurus tristriatus—The Jungle Striped Squirrel.
 This is larger than the last and is found only on the hills. It is darker and has narrow, short, pale stripes on the back.
 - 6. Sciurus sublineatus—The dusky striped squirrel.

This is smaller than the last two striped squirrels and is confined to the hills, having been recorded only from elevations of over 2,000 feet. The back stripes are short, narrow and close together.

Fam: Muridæ—Rats and Mice.

The rat fauna of the State has not been completely studied. More collecting and further investigation are necessary. Those that have been recorded are:—

1. Platacanthomys lasiurus—The Malabar Spiny Mouse.

This interesting mouse is found only on the hills, at elevations of more than 2,000 feet, where it lives in hollows made in old forest trees. The fur on the back is mixed with numerous broad flat spines. The tail is bushy, covered with long coarse hair. The whiskers are very long and the ears large and pointed.

2. Gerbillus indicus—The Common Indian Gerbille or The Antelope Rat.

This is common in most localities in Travancore. It is about the size of the common rat but has longer hind-legs and looks like a miniature kangaroo. It leaps well and can cover as much as four yards at a bound. It feeds on roots and grass and is sometimes destructive to crops.

3. Mus rattus—The Common Indian Rat.

This is ubiquitous and is one of the troublesome household pests.

The three other rats that are common are:-

- 1. Nesocia bandicoota-the Bandicoot rat,
- 2. Nesocia bengalensis-the common field rat and
- 3. Mus buduga—the common Indian field mouse.

Tame Elephants.

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Order proboscidea.

This order contains only one family Elephantidae which includes but one living genus Elephas. The Indian elephant is Elephas maximus indicus, which is fairly abundant in the forests of Travancore. The following extract from J. F. Bourdillon's Report on the forests of Travancore may be of interest.

"These animals are wild in the forests, and are in some places particularly abundant. They do not always remain in the same spot, but move about over large areas. their movements being regulated by the quantity and condition of the food available, and by the state of the weather. Over the greater part of Travancore they descend from the hills as soon as the water begins to fail there, that is to say, about January, and they are then to be found in the thickest and coolest parts of the lower forests in the vicinity of some river. As soon as the showers begin to fall in April, their instinct tells them that they can again obtain water on the hills, and that fresh grass has sprung up where the dry herbage was so lately burnt, and they immediately commence an upward movement to the higher ground. There they remain till about September when some, but not all of them, descend to the lower slopes of the hills and even to the low country, to see what they can get from the fields of hill-paddy then beginning to ripen, and they often destroy large quantites of grain. In November these migrants again ascend the hills and join their companions. Advantage is taken by us of the annual descent from the hills in the hot weather to catch these animals in pits, but in November no attempt is made to capture them as the pits are then full of The question has often been debated whether the number of elephants in the country is increasing or decreasing. I believe that most people would say that elephants are more numerous than formerly, but I am inclined to think that this impression is formed from the increased

damage done to cultivation of all sorts. If we recollect that cultivation is yearly extending, we can well understand that elephants are much more troublesome now than formerly, without there being any increase in their numbers; and if we could take a census of them we should probably find that their numbers are about stationary. I once attempted to estimate how many there are in the State; and I came to the conclusion that there must be from 1,000 to 1,500, the greater number of them being found in North Travancore, especially the Cardamon Hills. Sometimes elephants die in large numbers, as in the year 1866, when a murrain attacked them in the forests near Malayattur and fifty pairs of tusks were brought to the Forest Officers at that place and Thodupula in April and May of that year. Such epidemics would doubtless occur more frequently if the number of elephants increased unduly and the supply of food fell short, and their rarity is a sign that the animals are not troubled for want of food though their migrations show that it is not always to be obtained in the same place."

Elephants are protected by law in Travancore no one being permitted to kill them except under sanction. Ivory is a royalty.

Order Ungulata (Hoofed mammals).

The order is represented by three families.

Fam: Bovidæ—Hollow-horned ruminants.

This family is represented by the Bison and the Nilgiri Tahr.

1. Bibos gaurus (Bos gaurus)—The Gaur or the Bison.

The Gaur is fairly common in the hill ranges of Travancore and is about the largest of the existing Bovines, standing about six feet at the shoulder, and the finest representative of the group. The horns borne by the huge head are massive and markedly curved. Gaurs go about in herds grazing at dusk or in the early morning under the

leadership of an old bull. When age tells upon him, he is driven out after severe fight by a younger and stronger one. The defeated leader then wanders about alone. It is these solitary bulls that afford the finest trophies to the sportsman.

2. Hemitragus hylocrius—The Nilgiri Tahr.

This is the only representative of wild goats in Travancore. It is slightly larger than the Himalayan Tahr and is to be found in herds on the hills in suitable localities where there are grassy slopes and precipitous rocks. "The horns, almost in contact at the base, rise parallel for some length, then diverge and curve downwards in a bold sweep," The bucks leave the hard from December to April, when the does breed and go about with their kids.

Fam: Cervidæ-Deer.

The branching horns or antlers carried by the males are the distinctive characteristic of the deer. The horns of the deer are a mass of dead bone and are thus different from those of the "hollow-horned" ruminants. The new-grown antler is covered with "velvet"—a thick soft vascular skin covered with fine hair. When the growth of the antler is complete, the velvet dries up and is rubbed off in due course. The antlers are shed regularly and replaced. There are three species of deer in Travancore.

1. Mutiacus muntjak—(Cervulus muntjac).

The Barking Deer or the Rib-faced Deer. M. M. aureus is the race found in Travancore. This deer is found singly or in pairs in thick forests at all elevations. Its call from a distance sounds much like the bark of a dog, given at intervals, hence the name Barking Deer. The antlers are small and consist of a short brow tine and an undivided curved beam. There is a bony ridge extending down each side of the face from the base of the pedicel. The name Rib-faced Deer is due to the presence of these facial ridges,

2. Axis axis (Cervus axis)—The Spotted Deer.

This handsome deer is very common in open forests and bamboo jungles at the foot of the hills. They are found in herds and feed over-night till late in the morning and again in the afternoon.

3. Rusa unicolor (Cervus unicolor)—The Sambar.

This large dear is found at all elevations where there is a forest. The antiers are stout and grand, the brow tine set at an acute angle with the beam which at its summit forks into two nearly equal tines.

Fam: Tragulidæ—Chevrotains or Mouse Deer.

These differ from the true Ruminants described above in having a three-chambered stomach instead of the four-chambered stomach characteristic of the latter and in the absence of horns or antlers. Mouse deer have tusks which are better developed in males. The family is represented by a single species.

Moschiola meminna (Tragulus meminna)—The Indian Mouse Deer.

This tiny little beast, about ten inches in height, is found only on the hills where it leads a solitary and retired life except in the breeding season when the male and female keep together. The coat is olive brown, minutely speckled with yellow and the sides are marked with rows of elongate buff or white spots. The lower parts of the body are white.

Fam: Suidæ—Pigs.

Sus cristatus—The Indian Wild Boar. Herds of this animal are to be met with at the foot of the hills and about the cultivated patches where they sometimes do much damage to crops. The wild boar is said to interbreed with the taine pig when opportunities offer. The tusks in the males are well developed, both the upper and lower curve outwards and project from the mouth.

Order Catacea (Whales, Porpoises and Dolphins)

The species listed below specimens of which have from time to time been washed ashore on this coast or caught from the sea give us an idea of the forms that frequent this coast.

Fam: Physeteridæ—The Sperm Whales.

1. Cogia macleyi. The pigmy sperm whale. A specimen of this was stranded on this coast in 1926.

Fam: Delphinidae. (Dolphins).

- 1. Phocoena shocoenoides—The little porpoise.
- 2. Pseudorca crassidans—The false killer whale.
- 3. Tursiops catalania.
- 4. Tursiops dawsoni.
- 5. Steno lentiginosus—The speckled Dolphin.
- 6. Delphinus delphis-The common Dolphin.

Fam: Balaenida.

1. .Balaenoptera indica — The great Indian Fin Whale.

A very large specimen of this whale was stranded at Rājākkamangalam on this coast in 1904 and a smaller specimen on the Pūvār coast in March 1937.

Order Edentata.

The only representative of this order is the Indian Pangolin, Manis pentadactyla. It is a toothless mammal the body of which is covered with broad overlapping horny scales interspersed with a few hairs. It is nocturnal in habit and digs up nests of white ants on which it feeds by means of its long extensile tongue. During the day it lies up in a burrow scooped out under the ground by means of its strong claws. When attacked it rolls itself into a ball after the manner of a wood louse.

Birds.*

The bird-fauna of Travancore is rich and varied, there being about 360 species represented within its limits. Of these, however, three only appear to be peculiar to it, while a fourth one is reported only from the Pulney Hills. These were first brought to notice by Mr. Bourdillon and three are named after him-Bourdillon's Babbler (Rhopocichla atriceps bourdilloni), Bourdillon's Great-eared Night jar (Lyncornis cerviniceps bourdilloni), and Bourdillon's Black-bird (Turdus merula bourdilloni). This last named bird extends on to the Pulneys. Blanford's Laughing thrush (Trochalopterum jerdoni meridionale) is found on the hills of South Travancore extending on to the borders of Tinnevelly.

Some eighty five species are migratory, visiting us from their northern homes in the winter months only. Such are several Warblers, Thrushes, Swallows, certain Orioles and Wagtails, the Kestrel, the Osprey and the Falcon, several of the Plovers, Sandpipers, Snipes and Gulls, Terns and Teals. Certain others which are usually residents in the plains move to the hills in the hot months—such are the Crow-pheasant, the Hoopee, the Black-headed Oriole and the Paradise-Flycatcher.

As a detailed description of the vast and varied avifauna would occupy many pages, only an enumeration of the more important forms with such facts as may be of general interest will be attempted.

The vast order of Passerine birds is well represented, there being about 140 species, the total enumerated as occuring in South India being 204 species.

Two species of crows, the Indian House Crow (Corvus splendens splendens) and the Southern Jungle Crow (Corvus coronoides culminatus) are ubiquitous. The Tree-pies (Dendrocitta rufa rufa) with their chestnut reddish body, dark head and bill and long tail are fairly common in the plains

^{*} Revised and rewritten by Mr. A. P. Mathew, M. A.

and their mellow notes often mixed with a harsh repeated "ga-ga-ga" are familiar sounds to be heard in any garden. Several species of Babblers are present but the commonest is the Southern Jungle Babbler (Turdoides terricolor malabaricus) popularly known as "Seven sisters" as they go about in small parties of half a dozen or more. They are earthy brown birds rustling about in long hops among dead leaves and chattering all the while—their squeaks being described by Dewar as that of a revolving axle that requires oiling.

A small bright-coloured bird with a good deal of yellow and white about it may often be seen about the trees and bushes hunting for insects—this is the Common Iora (Aegithina tiphia). The female is green and white. Its very plaintive whistle which commences with a long drawn out high note followed by a shorter low note which may be expressed as "We-e-e-e-tu" or, as Mr. Ferguson described it, "a prolonged plaintive indrawn whistle on 'A' sharp falling to a short note on 'F' sharp," can be heard commonly all over the plains.

The Bulbuls are well represented. One of the most familiar is the common Red-vented Bulbul (Molpastes haemorrhous haemorrhous), a plain brown bird with a black head, white upper tail coverts and crimson undertail coverts. It has a cheery little song. A still more common Bulbul is the Southern Red-whiskered Bulbul (Otocompsa emeria fuscicaudata) which occurs both in the low country and on the hills. It is a plain brown bird with a white throat and breast and a black crest bending forward over its beak.

One of the common birds with a really pretty song is the Magpie Robin (*Copsychus saularis saularis*), a neatly built bird in black and white livery, to be met with usually in the neighbourhood of human habitations. Its sweet notes are the first one hears just as the dawn begins to break.

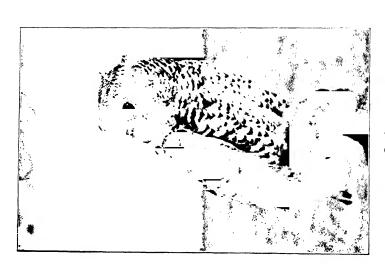
A white bird with a black crested head and two very long white tail feathers may often be seen flitting in undulating flight from tree to tree. This is the Indian Paradise Flycatcher (Terpsi phoni paradisi paradisi). The female is chestnut red with black head and the long median tail feathers are absent. The young males resemble the female and attain to the white adult plumage only in the fourth year. Another Flycatcher that is fairly common in the plains is the White-browed Fantail Flycatcher (Rhipidura aureola). It frequents gardens and cultivated areas and may easily be recognised by its habit of dancing about the branches of trees or on the ground with its tail spread out widely in the shape of a fan. It is a dark brown bird with a white stripe on the sides of the head running over the eyes. It has a sweet note.

Of the shrikes at least three species may be seen not uncommonly, two of which go about in flocks. One, the common wood shrike (*Tephrodornis pondiceriana pondiceriana*), a plain ashy brown bird with a broad white eyebrow and white outer tail feathers is most easily recognised by its pretty mellow whistle which has been described as "Be thee cheery" or as "tanti-tuia". Another, the Small Ninivet (*Pericrotus peregrinus malabaricus*), has a finer dressin lack, scarlet and grey, though the female has a more subdued costume. The third is the large Cuckoo-shrike (*Lalage sykesii*), a grey bird much larger than the two preceding forms.

The Drongo or the King-crow (Dicrurus macrocercus) is perhaps the most common bird in the plains leaving aside, of course, the ubiquitous crow. This is a most active little bird in black livery feeding exclusively on insects which are harmful to cultivation—so this bird is most distinctly a valuable ally of the farmer and deserves every encouragement and protection. Closely allied to this is the Racket Tailed Drongo (Dissemurus paradiseus malabaricus) which is common in the forests but is not uncommon in the low country in North Travancore. It is a good songster.

The most familiar of the Warblers is the well known Tailor-bird (Orthotomus sutorius sutorius). It is a tiny





owi.

plain greenish brown bird with a remarkably loud voice continuously repeating its loud call "To-wee, to-wee" which may be heard in any garden. Its nest is a wonderful structure. The walls are often growing leaves the edges of which the bird draws together by means of cotton or fibre—hence its popular name. The Fantail Warblers (Cysticola), Wren Warblers (Franklinia and Prinia) and the Willow Warblers (Phylloscopus and Acanthopneuste) are also represented.

Conspicuous by their colour are the Orioles, commonly known as mango-birds. Oriolus kundoo is the Indian The Orioles. Oriole—a bright yellow bird with pink beak and red eyes. There is some black on the sides of the head, in the wings and the tail. During flight this bird looks like a flash of gold. The more common Oriole, however, is the Black-headed Oriole. (Oriolus melanocephalus) which differs from the former in having the whole head, chin and throat black. They have a rich soft mellow note.

No one can fail to notice the common Myna (Acridotheres tristis tristis), a plain brown bird with a black head and breast shading off into vinous brown, often seen walking after cattle and, as its name implies, hunting for grass hoppers. It is easilytamed and is a splendid mimic. In captivity it can be taught to talk and it readily picks up the notes of other birds. Another Myna, the Jungle Myna (Acthiopsar fuscus), very like the former in colouration and habits is also common. It is a smaller bird than the common Myna and may be distinguished from it by its size and absence of the bare skin round the eyes which are here well feathered.

The common Weaver-bird (*Ploceus baya*) is a sparrow-like bird of gregarious habits found especially in cultivated districts, where it associates in large flocks and does some damage to ripening crops. These weave wonderful

flask-shaped or retort-shaped nests which are hung up from trees.

The beautiful little Munia (Munia malacca) in rich chestnut and black with a thick bill is fairly common in small flocks. The House-sparrow (Passer domesticus) is found in most places where there are human habitations.

Of the Wagtails one, the large Pied Wagtail (Motacilla lugubris madraspatensis), alone is resident here, others

The Wagtails.

being only winter visitors. This is a black bird with a conspicuous white eyebrow. The breast and the lower plumage are white. There is a broad white bar on the wing. It is a fine songster and may sometimes be seen sitting on a convenient perch and pouring forth its melody.

The larks are more often heard than seen. The Indian Skylark (Alauda gulgula) may often be heard both the Larks. In the low country and on the hills in open ground. Another lark, the Madras Bush Lark (Mirafra assamica affinis) is common. It has the habit of sitting on some exposed spot such as the roof of a house, whence it rises in a short soaring flight while it utters its shrill note. Both this and the Indian pipit (Anthus richardii rufulus) frequent grass land and are to be found in crowds on rice fields after the crop is cut and the ground has dried.

The prettiest of our garden birds are the sun birds or 'honey suckers'—charming little birds shining with sun birds.

Sun birds.

glorious metallic colours. "Nothing can be more charming than to watch a flock of the commonest kind, Leptocoma zeylanica, skirmishing through a bush in flower, never still, at one time spreading their tails like fans, anon fluttering their wings up and down and keeping up a constant chatter. There are two

other kinds—Leptocoma asiatica and L. lotenia, but these are not so conspicuous. The smallest and the brightest of all, L. minima, is abundant at the foot of the hills and may be found at all elevations."

The Indian Pitta (*Pitta brachyura*) with its short tail and many coloured plumage is found as a winter visitor in the plains. It has a cheery whistle.

Leaving the plains and glancing at the higher elevations, we note that bird life is most abundant at the foot of the hills. The noisy Southern Tree-pie (Dendrocitta leucogastra), which moves about in small parties of three and four, ascends to 3,000 feet, while the Southern Grey Tit (Parus major mahrattarum) is found even at higher elevation on the High Range. This latter bird has a black head, throat and breast with white cheeks and grey back. The former one is a beautiful bird with a black head, a snow white breast, chestnut bay back and a tail about a foot long of grey and black. Another beautiful bird is the velvetfronted Blue Nuthatch (Sitta frontalis frontalis.) At elevations of about 2,000 feet and upwards it may be seen creeping about the trunks of trees. As its name implies, it is blue with a dark velvety black band on the forehead. The Laughing Thrushes and the Babblers are also well represented. One of the Laughing Thrushes, Blanford's Laughing Thrush, is special to the Travancore Hills being found only on the high hills of South Travancore. On the High Range this is replaced by the Palni Laughing Thrush (Trochaloblerum jerdoni fairbanki). Bourdillon's Babbler (Rhopocichla atriceps bourdilloni) is confined to the Travancore Hills where it is reported to be fairly common. The Southern Scimitar Babbler (Pomatorhinus horsfieldi travancoriensis) is more frequently heard than seen, as it is a shy bird keeping to the tangled undergrowth. It associates in parties of three and four and keeps up a constant flute-like whistle. Nilgiri Quaker Babbler, (Alcippe poioicephala poioicephala),

so called due to the lack of brilliancy of plumage, is found on the High Range.

The Bulbuls are represented by Jerdon's Chloropsis (Chloropsis jerdoni), a green bird with a black chin and a blue moustache frequenting trees and not to be easily distinguished as its colour harmonises so well with the foliage. The Southern Red Whiskered Bulbul (Otocompsa emeria fuscicaudata) is even more abundant. Another Bulbul, the Yellow-Browed (Iole icterica), is brightly coloured in yellow with brown wings. At slightly higher elevations up to the very summits the southern Indian Black Bulbul (Microscelis psaroides ganeesa) is very common. It is a dark grey bird with a black head and an orange red beak. Its loud cheerful notes are a sure sign that you are a long way above the sea-level. Numbers of the Southern Indian Stone Chat (Saxicola caprata atrata) are found on the High Range. The male is black with white upper tail coverts and a white patch on the wing; the female is grey with reddish upper tail coverts and black tail. Bourdillon's Black bird (Turdus merula bourdilloui) is fairly common in the High Range. Of the Thrushes the commonest is the Malabar Whistling Trush (Myophoneus horsfieldii) with a loud melodious whistle which has gained for it the name of "The Whistling School-boy". This call may be heard in most well-wooded places in the vicinity of running water usually at dawn and at sunset. It is a fine bird to look at, black with a considerable amount of blue about it. In the winter months the Blue headed Rock Thrush (Monticola cinclorhyncha) and the Indian Blue (M. solitaria pandoo), and in the higher elevations the Nilgiri Thrush (Oreoccincla dauma nilgiriensis), are to be met with, the last one, however, not so plentiful as the The Blue-headed Rock Thrush abound in the former ones. forests especially in the neighbourhood of cultivation. The male is a handsome bird in blue, black and red, while the female is plainer, dressed in brown and white. The Indian Blue frequents grass land where there are rocks; the males

are coloured bright blue and brown, while the females are dull blue and white. The Nilgiri thrush is black and brown and the sexes are similar.

Most of the Fly-catchers are winter visitors to the hills. The Black and Orange Fly-catcher (Ochromela nigrorufa) and the Greyheaded Fly-catcher (Culicicapa ceylonensis ceylonensis) are common in the High Range, while the little Brown Fly-catcher (Alseonax latirostris) is found from the foot of the hills to 2,000 feet. These take up their perch on a branch and sit motionless till they spy a passing insect, when they make a dash after it and securing it return to the perch again. The Nilgiri Blue Flycatcher (Stoparola albicaudata) also occurs at high elevations. It has a pleasant cheerful song which is frequently heard from the thick undergrowth. Flocks of Malabar Wood Shrikes (Tephrodornis belvica sylvicola) are to be met with up to 3,000 feet-grey birds with a black band through the eye. They keep up a harsh chattering as they search the trees for insect food. The Black backed Pied Shrike (Hemipus picatus picatus) is also fairly common. From the foot of the hills to about 2,000 feet the Racket Tailed Drongo (Dissemurus paradiseus malabaricus) makes itself heard continuously. It is a glossy black bird with a fine crest and greatly elongated lateral tail feathers which are bare for a certain distance and webbed at the end; hence the popular English name.

In the grass lands on the High Range the Red headed Fantail Warbler (Cysticola exilis erythrocephala) is fairly common. On the tops of the trees flocks of the Fairy Blue Bird (Irena puella puella), one of the most beautiful of all our birds, are a feature of jungle life to about 2,000 feet. At a distance they seem plain enough, but if you get a closer view, the metallic blue of the back and the crown of the male bird, contrasting with the black of the other parts, shows a scheme of colouring that cannot be surpassed.

One of the most noisy birds is the Southern Grackle, (Eulabes religiosa), a black bird with yellow beak, yellow legs

and yellow wattles on the back of the head. It has a powerful voice and a variety of notes, some harsh and some pleasing. It is found in the hills up to 3,000 feet elevation in the South and in the High Range up to 5,000 feet. Flocks of little munias, small finch-like birds, may be seen feeding on the ground or clinging to the lantana bushes on which they love to perch. The commonest species are the White backed Munia (Uroloncha striata striata) and the Rufous-bellied Munia (U. rufiventris). In the High Range the Common Indian Rose Finch (Carpodacus erythrinus roseatus) comes in flocks as winter visitors. On every path the elegant little Grey Wagtail (Motacilla cinerea caspica) may be seen tripping along. It is our earliest visitor and stays the latest. The Forest Wagtail (Dendronanthus indicus) is another winter visitor of solitary habits frequenting open jungle. The White Wagtail (Motacilla alba) visits the High Range in winter, while the Nilgiri Pipit (Anthus nilghiriensis) and the Malabar Crested Lark (Galerida malabarica) are permanent residents there in the grass lands; the latter has a fine song. Creeping among the leaves the little "White Eye" (Zosterops palpebrosa palpebrosa) is a common sight. Its green plumage and the conspicuous ring of white round the eye render it easy to recognise.

The next order "Coraciformes" is represented by some sixty species. Of about a dozen Wood-peckers which are found within our limits only three species are fairly common in the plains and these are, the Golden Backed Wood-pecker (Brachypternus benghalensis puncticollis), the Yellow Fronted Pied Wood-pecker (Liopicus mahrattensis) and the Southern Rufous Wood-pecker (Micropternus brachyurus gularis), the first named of which is by far the commonest. They feed exclusively on insects which are picked off the trunks of trees. They are skilled climbers but their flight is undulatory and accompanied by their harsh cries. The two

small wood-peckers, the Ceylon Pigmy Wood-pecker (Yungipicus hardwickii gymnopthalmus) and the Malabar Heart spotted Wood-pecker (Hemicircus canente cordatus) are fairly common on the hills. The latter is easily recognised by its peculiar cry, something like that of a Kestrel and also by its black plumage with heart shaped black spots on the buff coverts of the wing. The former is a small brown bird with white streaks on the plumage and in size about five inches long of which an inch and a half are tail. On higher elevations these are replaced by certain other wood-peckers such as the common Golden backed three-tood Wood-pecker (Dinopium javanensis rubropygiallis), the Tickell's Golden backed Wood-pecker (Chrysocolaptes gullacristatus delesserti) and the Malabar Great Black Woodpecker (Thriponax javanensis hodgsonii). The first of these is common everywhere in these heights, the second in the neighbourhood of streams, while the third is commonest in open jungle.

The Barbets are tree haunting birds with thick bills. They have loud monotonous calls repeated persistently. They nest in holes in trees which they make The Barbets. in wood-pecker fashion. The commonest in the plains is the Indian Crimson-breasted Barbet (Xantholaema haemacebhala lutea) popularly known as the Coppersmith. It is a green thick-set bird with a yellow throat bordered below by a crimson band and with a crimson forehead. It has a strong coarse beak. This bird is usually heard rather than seen. Its loud monotonous metallic "tonk. tonk" like the tapping of a hammer on metal is one the most familiar sounds of the country side. A near relation of this, the small green Barbet (Thereiceryx viridis), is also very common and can be heard frequently. It starts by uttering a harsh laugh "tur-r-r" which is followed by a loud penetrating monotonous "kuturkutur-kutur."

Of the Cuckoos, the Indian Cuckoo (Cuculus micropterus) and the Indian Plaintive Cuckoo (Cacomantis merulinus passerinus), though not common, are The Cuckoos. sometimes heard in the low country. A Common Cuckoo that intrudes upon one's notice by its persistent cry is the common Hawk Cuckoo (Hierococcux varius). It is a gray bird very like a hawk; hence its popular name. It is also called the 'Brain Fever Bird' in reference to its persistent cry which may be rendered "pi-pee-ah" with emphasis on the second syllable and repeated in an ascending scale, "pi-pee-ah, pi-pee-ah, pi-pee-ah" or, as some prefer to express it, "Brain-fe-ver, Brain-fe-ver, Brain-fe-ver". The Indian Koel (Eudynamis scolopaceus scolopaceous) is another common Cuckoo especially during the hot months when its noisy cries—a crescendo ku-il, ku-il, ku-il or repeated ku-y-o, are heard unceasingly from morning to night. The Crow-pheasant or the common Coucal (Centropus sinensis) is quite a common bird with a black body and chestnut red wings. Its call which is heard at all times of the day is a deep loud sonorous 'hoot-hoot' repeated slowly.

Flocks of Rose-ringed Green Parequets (Psittacula krameri manillensis) may be seen feeding on fruit trees or rapidly flying in search of food and uttering shrill cries as they fly. This is very destructive to fields of corn and fruit gardens. In the lower elevations and at the foot of the hills the Western Blossom-headed Paroquet (Psittacula cyanocephala cyanocephala) is conspicuous, going about in flocks. As one ascends the hills, these gradually disappear and in their place flocks of the Blue-winged Paroquet (Psittacula columboides) and the Malabar Loriquet or the Love-bird (Coryllis vernalis rubropygialis) of small size and green colour appear.

The Indian Roller (Coracias benghabensis indica) is a brightly coloured bird sometimes called the "Blue Jay". Its head, neck and throat are greenish blue and the wings and

tail composed of alternate bands of light and dark blue. These may not be much noticed when the bird is perched, but, as Dewar says, "flight transforms it: as it flaps heavily along, it is a study in Oxford and Cambridge blue." In the hot weather, which is its breeding season, it is very noisy, uttering strange hoarse cries as it performs weird antics in the air.

Another brightly coloured and elegantly built bird is the common Indian Bee-eater (Meros orientalis orientalis). Perched on telegraph wires or any other suitable perch they may be frequently met with making sallies into the air after insect prey. The bird is emerald green with a black necklace and a black band through the eyes. "The wings are shot with bronze so that as the bird sails along on outstretched pinions, it looks now green, now bronze, as the rays of the sun are reflected at different angles. There is some black in the tail and the two median tail feathers project as bristles a couple of inches beyond the other tail feathers."

Of the King-fishers the white breasted King-fisher (Halycyon smyrnensis fusca) is perhaps the most common. It is a gorgeously clad bird, its white The King-fishers. breast, chestnut brown head and bright blue back and wings make it evident to the eye, while its high-pitched tremulous cry forces itself on the ear. It is often found far from water, frequenting gardens and compounds, since it feeds largely on insects. A smaller relation of this, the Common King-fisher (Alcedo atthis tabrobana), is found on the banks of every tank or stream looking for fish to which its diet is limited. Its habit is to perch on a bough overhanging the water or on the bank itself and thence to dive obliquely into the water after its quarry. Another common King-fisher in the plains is the Indian Pied King-fisher (Ceryle rudis leucomelanura), a black and white bird which may be seen hovering over water and shooting down with a direct plunge when it descries a fish. 87

In the forests the hoarse croaking roar of the great Horn-bill (Dichoceros bicornis) can be heard a considerable distance and the beating of their wings as they fly across a valley attracts one's attention at once. They are, however, not very abundant nor so common as their near relation, the Malabar Grey-hornbill (Lophoceros griseus griseus). These latter also make their presence known by their peculiar cry. A very beautiful bird that frequents heavy forests over 2,000 feet high is the Malabar Trogon (Pyrotrogon fasciatus malabaricum). It has a broad black head set on a thick neck, a yellowish brown back and a long black tail with chestnut centre feathers. The breast is black bordered by a white band and below this again it is pale crimson. The female has the head, neck and upper breast brown, there being no white band, and the under parts are brownish buff.

The Hoopæ (*Upupa epops*) is a common ground feeding brownish bird with a long bill and a large fawn-coloured crest, all the feathers of which are tipped with black. Its note is a soft "uk, uk, uk" repeated rapidly.

Of the Swifts the Common Indian Swift (Micropus affinis nipalensis) is fairly common in the plains. It flies Swifts. with great velocity and never perches; when it wishes to rest, it repairs to its nest. High upon the hills the "whish" of the Brown throated Spinetail (Hirundapus gigantus indicus) is a familiar sound as it rushes by at more than double the rate of the fastest Express. They are more often heard than seen but at times they play and then the rate of flight is moderate. The Indian Edible Nest Swiftlet (Collocalia unicolor unicolor) is the other swift that is most common in the hills. On the High Range the Great Alpine Swift (Micropus melba melba) congregates in numbers hawking for insects.

Towards dusk the monotonous "tuk, tuk, tuk, tukeroo" of the common Indian Nightjar (Caprimulgus asiaticus) may be heard in the plains. It sounds like a stone





Peacock.

skimming over ice and hence is sometimes called the "Ice-bird". It is quite nocturnal in habits and so it is heard but not seen.

The next order "Striges" consists of the Owls and forms a well marked out group. They are creatures of the Order Striges.

Order Striges.

night and so, with one possible exception, are not come across in the day-time. This exception is that clown, the spotted Owlet (Athene brama brama) which comes out long before sunset and pours forth a volley of chuckles and squeaks, often two individuals shouting at once. "When it catches sight of a human being it stares at him with its bright golden orbs and, as Eha observes, bows with sarcastic effect."

Other common owls that may be met with in the low country are the Collared Scope Owl (Otus bakkamæna bakkamæna) and the Brown Wood Owl (Strix indranee indranee). The latter bird is looked upon by some people as a bird of ill omen. It is fond of perching on the 100f of a house at night and hooting, its cry being a weird screech. The Fish-Owl (Ketupa zeylonensis zeylonensis) is found along the sea coast. The note of the Brown Hawk-owl (Ninox scutulata hirsuta) is frequently heard at night on the hills.

The order "Accipitres" includes the Birds of Prey, such as, the Falcons, Eagles, Kites and the Hawks.

Order Accipitres.

The Osprey (Pandion haliaetus haliaetus) occurs as a cold weather visitor to the lakes near the coast, while the White Backed Vulture (Pseudogyps benghalensis) is the commonest vulture in the low country. The most familiar of our resident Birds of Prey are of course the Brahminy Kite (Haliastur indus indus) and the Common Pariah Kite (Milvus migrans govinda) which are too familiar to need any description. The crested Hawk Eagle (Spizaetus cirrhatus) is a fine bird, for the most part brown, the feathers having darker centres.

It has a long black crest tipped with white. The Shikra (Astur badius) is also fairly common in the low country. The scream of the crested Serpent Eagle (Spilornia cheela), as it soars aloft, is commonly heard on the hills. The Black Eagle (Ictinaetus malayensis perniger) may be seen quartering the tops of the trees in search of small birds' eggs and young at all seasons, while the Kestrel (Cerchneis tinnunculus objurgatus) and the Indian Hobby (Falco severus rufipedoides) are winter visitors to the higher elevations.

The Pigeons (Order "Columbae") are represented by a dozen species of which the commonest in the plains is the Indian Blue Rock Pigeon (Columba livia intermedia) which may often be met with in the dry paddy fields after the crops are cut. On the hills the whistle of the Grey-fronted Green Pigeon (Dendrophassa pompadora affinis) and the booming note of Jerdon's Imperial Pigeon (Ducula badia cuprea) are not uncommonly heard, while the Bronze Winged Dove (Chalcophaps indica indica) may be seen in heavy jungles feeding on the ground.

The Order "Gallinae" is represented by the Grey Jungle-Fowl (Gallus sonneratii) which may be met with on jungle paths either early in the morning or after sun-set. The Jungle Bush Quail (Perdicula asiatica asiatica) is found in the southern jungles near the Cape but the commonest Quail is on the High Range in the north—the Painted Bush Quail (Cryptoplectron erythrorhynchum). The Grey Partridge (Francolinus pondicerianus) occurs on the southern jungles.

Turning now to the marsh and water birds, we find them pretty well represented, as the backwaters along the coast afford them shelter and food. In or about every tank where there are bushes a dark slaty grey bird with a white breast may be seen for

a second feeding in the open and then skulking off quickly into cover. This is the white-breasted Water-hen (Amaurornis phoenicurus). "The Water-Cock (Gallicrex cinerea) is not its husband but has a wife of his own." They are larger birds clad alike in winter, in dark brown with paler edges to the feathers. In summer, however, the male dresses more or less in black with some white below. They are common about the paddy fields. On every weed-covered tank the elegant Jacanas, both the Bronze Winged (Metopidius indicus) and the Pheasant-tailed (Hydrophasianus chirurgus) are to be seen treading delicately over the water leaves. The latter in its breeding plumage is a lovely bird.

During the winter months numerous Terns (Order "Charadriiformes") may be seen seated on the posts that mark the channel along the backwaters. Order Charadrii-Smaller Crested Tern, These are the formes. (Thalasseus benghalensis benghalensis). The larger crested Tern (T. bergii edwardsi) is fairly common along the sea shore. "Two Lapwings, the Red-wattled (Lobivanellus indicus indicus) and the Yellow-wattled (Lobibluvia malabarica), may be frequently heard and seen. The former prefers the neighbourhood of water and when flushed goes off remonstrating "Why-did-you-do-it." The other prefers dry plains where it circles about uttering much the same cry but with one note less. Its cry may be heard for some time after dark. These are residents and the Little Ringed Plover (Charadrius dubius jerdoni) may almost be reckoned so, as there are few months in which individuals may not be met with. It frequents the shores and paddy fields. Other winter visitors are the Sandpipers commonly called 'Snippets,' the most numerous of which are the common Sandpiper (Tringa hypoleucos) and the Wood-sandpiper (T. glareola). Both the common and the Pintail Snipe (Capella gallinago and C. sternaura) afford sport to the gunner in winter, while the beautiful Painted Snipe (Rostratula benghalensis benghalensis) is a permanent resident. Ferguson says it is fairly common in the low country wherever there are rushy marshes and also in paddy fields. The Wood Cock (Scolopax rusticola rusticola) and the Wood Snipe (Capella nemoricola) occur in the higher elevations, especially on the High Range.

The spotted Billed Pelican (Pelecanus philippensis)
occurs in South Travancore but is by no means very
common. The Indian Darter or the Snakebird (Anhinga melanogaster) is common
in all the larger fresh water lakes. It is
abundant in the Śāsthānkōtta lake and also in the lake
formed by the Periyār Dam at 3.000 feet elevation.

In the paddy fields the Pond-heron or the Paddy-bird (Ardeola grayii) is always abundant. The little Green Heron Order Herodiones.

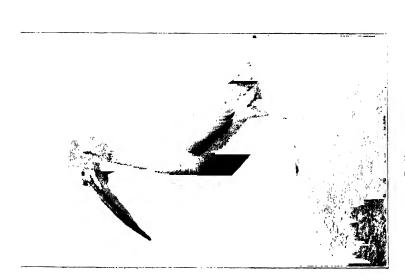
(Butorides striatus javanicus) is common from November to April being a winter visitor. The small Chestnut Bittern (Ixobrychus cinnamoncus) and the Black Bittern (Dupetor flavicollis flavicollis) are also common along the lakes and backwaters, while the Yellow Bittern (Ixobrychus sinensis sinensis) is met with near the backwaters in North Travancore.

The Ducks (Order "Anseres") are represented by four species of Teals and the Dabchick or the Indian Little Order Anseres.

Grebe. The Teals are mostly winter visitors and not very abundant. The commonest is the Whistling Teal (Dendrocygna javanica) which is resident occurring in weedy tanks and lakes. The Cotton Teal (Nettapus Coromandelianus) and the Common Teal (Nettion crecca crecca) are winter visitors and not very common. Large flocks of the Blue Winged Teal (Querquedula querquedula) are found on the backwaters in North Travancore during winter months. The Indian Little Grebe



Crested Hawk Eagle.



Pelican.

(*Podiceps ruficollis capensis*) is fairly common and resident, being found where there is standing water. Its habit of instantly diving on alarm and of bobbing up again in a totally unexpected quarter is well known.

The low country in the south, within twenty miles of Cape Cōmorin, has a slightly differing bird population, a number of species being found here which are not represented in the north. The chief of these are (Lanius vittatus) the Bay backed Shrike, (Uroloncha malabarica) the White throated Munia, (Francolinus pondicerianus) the Greypartridge, (Neophron percnopterus ginginianus) the smaller White Scavenger Vulture, (Streptopelia senegalensis cambaiensis) the little Brown Dove, (Streptopelia decaocto decaocto) the Indian Ring Dove, and the Brown-headed Gull (Larus brunnicephalus). The Palm-swift (Tachornis batasiensis batasiensis), though not confined to the south, is far more abundant there.

Reptiles. *

The reptiles include the Crocodiles (*Crocodilia*), the tortoises and the turtles (*Chelonia*), the lizards (*Lacertilia*) and the snakes (*Ophidia*). Two species of Crocodiles, nine of Chelonians, thirty-three of lizards, and seventy-four of snakes are recorded from Travancore.

The Crocodiles are represented in Travancore by two species, viz., Crocodilus porosus and Crocodilus palustris. Neither of them is peculiar to the State.

Crocodilus porosus. (Muthalai) is commonly known as the Estuarine Crocodile and as the Salt-water Crocodile. It is common in the mouths of the rivers in North Travancore and in the Vēmbanād kāyal. It is the only crocodile that occurs in brackish or salt water. It may occasionally swim far out into the sea. Correlated with its sea-faring

[•] Revised by Mr. John E. Chelladurai, M.A.

habit it enjoys the widest distribution, ranging from Cochin to Australia. It also enjoys the distinction of being the largest living reptile. It may grow to a length of thirty feet but such large specimens are seldom seen. Ordinarily a fair-sized specimen does not exceed twenty feet. Large specimens prove dangerous; for, they may take to man-eating. Fish, however, forms their usual food.

The female builds a crude nest out of decaying leaves and coarse grass that grows near the water margin. The eggs are white, hard-shelled and oval and number about fifty. After they are laid, they are covered up with more decaying leaves. The heat generated by the fermentation of the leaves helps to incubate the eggs. The mother frequently visits the nest and when the young ones emerge, she leads them to the water.

Crocodilus porosus is characterised by the presence of 17—19 teeth on each half of the upper jaw. Of these four teeth occur on the premaxilla. The palatal boundary line between the premaxilla and the maxilla takes the form of the letter W.

Crocodilus palustris (Chīnkaṇṇi) is popularly known as the Marsh Crocodile and as the Mugger. It is a freshwater form occurring in most of the rivers all over Travancore. It is much smaller than the Estuarine Crocodile, the largest specimen measuring only thirteen feet. It feeds upon fish, aquatic birds and small mammals. It seldom attacks man.

The eggs, about twenty in number, are laid in a pit on the bank and covered over with sand. They hatch out in about six weeks' time. When the young ones escape out of the shells, they make little noises. Hearing their call the mother scoops out the sand and conducts them to the water.

The Marsh Crocodile bears 19 teeth on each side of the upper jaw. Five of these are borne by the premaxilla. The palatal suture between the premaxilla and the maxilla is fairly straight. The Chelonia are represented by nine species. Four of them occur in the sea and frequent the Travancore coast;

Chelonia (Turtles and Tortoises). two are land forms and three occur in fresh water. None of them is peculiar to Travancore.

The four species of marine Chelonia are: 1. Dermochelys coriacea, 2. Eretmochelys imbricata, (Chelone imbricata), 3. Chelonia mydas and 4. Caretta caretta olivacea (Thalassochelys caretta).

Dermochelys coriacea, known as the Leathery Turtle or the Luth, is the largest living Chelonian which may attain a length of six and a half feet and a weight of nearly a ton. The name Leathery Turtle is associated with the fact that the body is covered with a smooth leathery skin devoid of horny epidermal shields. In the newly hatched young one, however, as in the other Chelonians, the skin does bear epidermal scales. But these are early lost, leaving the skin unprotected by any external armour. The dorsal side of the trunk bears five longitudinal ridges. The limbs are large and paddle-shaped and do not bear claws. The turtle is of a dark brown colour relieved with pale yellow or white spots. It is a rare visitor to the Travancore coast. A few specimens are seen every year on the Tangaśsēry coast, when they come ashore to lay their eggs. Their flesh is coarse and is not eaten, but the eggs are collected. They are occasionally seen on the Trivandrum coast as well.

- 2. Eretmochelys imbricata (Chelone imbricata) or the Hawksbill Turtle, so named from its hooked jaws, is an occasional visitor to the Travancore coast. Its trunk is covered with large, overlapping, horny, epidermal shields which form the genuine tortoise-shell of commerce. Its flesh is not wholesome, but the eggs are in demand and are collected.
- 3. Chelonia mydas, the Green Turtle or the Edible Turtle, is the most common of the marine Chelonia. Every year, all along the coast, specimens are caught when they

come ashore to lay their eggs. Its flesh is greatly relished. Its fat has a pale green colour, whence the popular name the Green Turtle. It is a fair-sized Chelonian measuring a length of four feet. Its body is covered by large epidermal shields; these, however, do not overlap but meet by their edges like floor tiles. The paddle-shaped limbs bear a single claw. It is a brown coloured turtle which is mainly vegetarian. Sea-weeds form its chief food. All the other marine turtles are carnivorous and feed upon molluscs and orustaceans.

4. Caretta caretta olivacea (Thalassochelys caretta), the Loggerhead Turtle, is fairly common on the Travancore coast. Its flesh is not considered wholesome but the eggs are collected. The horny shields of the trunk meet by their margins. The paddle-shaped limbs bear one or two claws. The turtle is of a dark brown colour. Hatchlings, as they make for the sea, are occasionally picked up from the sandy beach not far from Trivandrum.

The land tortoises are represented by two species, (1) Testudo elegans and (2) Testudo travancorica.

Testudo elegans or the "starred tortoise" has, as its name suggests, a very pretty colour pattern. The epidermal shields of the carapace are painted with bright yellow stars on a black background. On the plastron the yellow rays of the stars are wider and more numerous so that the yellow colouration is more in evidence. In old specimens the colour tends to fade. The legs are short and stumpy, the fore-leg bearing five and the hind-leg four claws. The tortoise has a very restricted distribution, being confined to the dry low hills in the southern extremity of Travancore. It is a vegetarian, feeding upon leaves and fruits. The eggs are nearly spherical and are laid in a burrow half a foot deep and covered over with the earth.

Testudo travancorica occurs all over the hills of Travancore up to an altitude of 1,500 feet. It is not confined to Travancore but occurs in Cochin and Coorg as well. Its

carapace is of a reddish brown colour relieved by yellowcentred black blotches. The plastron is yellowish with a few black blotches.

Three Chelonians are recorded from the fresh-water ponds and streams. They are Geoemyda trijuga coronata. Lissemys punctata granosa and Pelochelys bibroni.

Geoemyda trijuga coronata occurs in ponds and pools all over the State. The carapace region bears three longitudinal ridges and it is of a dark brown or black colour. The plastron region is of the same colour but bordered with yellow. The top and front part of the head is black with the sides yellow. Adapted to an aquatic life, its toes are webbed. The fore-limb has five claws and the hind-limb four. It is a vegetarian and feeds upon water weeds. The eggs are oval and are laid in a burrow on the bank.

Lissemys punctata granosa (Pāl Āmai) is one of the fresh water turtles or mud turtles. It is fairly common in fresh water ponds and tanks and is often reared in wells. It differs markedly from the other pond tortoise in having no external armour of epidermal shields. The carapace and plastron are covered with a smooth skin, a condition which recalls that of the Leathery Turtle. The snout is prolonged into a short proboscis which bears the external nasal openings at its tip. The head and limbs may be hidden under a valve-like fold of the skin. It is carnivorous and feeds upon fish. The eggs numbering about ten or twelve are laid in burrows not far from the water margin. The mud turtle is of a pale white or cream colour, whence its vernacular name.

Pelochelys bibroni (Pelochelys cantorii) is the river turtle fairly common in the rivers of Travancore. It agrees with Lissemys punctata granosa in having no epidermal armour; but it differs in having no valve-like fold of skin to conceat the retracted hind limbs. It has paddle-shaped, three-clawed limbs and a very much flattened body with a circular outline.

The lizards are represented by thirty three species.

Two of them, Dasia subcaerulea and Lygosoma dawsoni, appear to be peculiar to
Travancore.

The family Gekkonidae is represented by six species belonging to two genera, Cnemaspis and Hemidactylus.

Cnemas pis indica (Gonatodes indicus), C. Ornata (G. ornatus) and C. beddomei (G. marmoratus) are three species, of small-sized lizards with round pupils. They occur in the hilly regions of Travancore.

Hemidactylus (Palli) is a genus of special interest as it includes the familiar geckos. The members of this genus have vertical pupils and two rows of suctorial lamellæ on the under-side of the digits. H. triedrus is the largest of the three species of Hemidactylus that occur in Travancore. The body, from snout to vent, may reach a length of about three inches. It is occasionally seen in houses; but commonly it is found on trees. It is found in the low country as well as on the hills up to an altitude of 4,000 feet. H. brooki and H. frenatus which go under the popular name of House-Geckos are common in houses. They are about the same size, H. brooki being only slightly larger. The House-Gecko clings to the surface of walls and to the under-side of the ceiling in houses with the help of the suctorial lamellæ of its digits. The presence of the gecko is often made known with startling suddenness by a series of quickly repeated clicking noises. It is nocturnal in its habit and insects form its chief food. It is attracted to lights by the insects that hover round it. Its tail is fragile and readily breaks off when held by an enemy. The lost tail is regrown. Occasionally a double tail replaces the lost one. The eggs are two in number. They are round, white and brittle-shelled and laid in a crevice in the wall or other suitable place.

'Agamida-This is represented by eleven species.

Draco dussumieri (Para Onthu) is the most interesting of the Agamidæ. It is commonly called the flying lizard or

the flying dragon. It is a small-sized arboreal lizard commonly found in the coconut and arecanut plantations in North and Central Travancore. It is also a denize of the low-lying forests in parts of South Travancore. It is a common lizard in the Kallar forests near Trivandrum. As its popular name suggests, it can make long downward glides from tree to tree with the help of its parachute. This consists of a lateral expansion of the skin on each side of the trunk, supported by six very much elongated ribs. When not flying the membrane and the ribs are folded back against the side of the trunk. The general surface of the body and the exposed margin of the flight membrane have a dull brown colour which blends with the colour of the tree trunk. The hidden folds of the membrane are brightly coloured with yellow patches, and during flight the lizard is as striking as a butterfly. But when it lands again on the tree-trunk, it practically vanishes from view. In the throat region there is a pouch which is larger in the male. Its function is obscure. Arboreal as it is, it descends to the ground to lay its eggs, numbering about four or five, in a burrow.

Sitana ponticeriana is a common brown lizard of the open country all over Travancore.

Salea anamallayana is the common lizard of the hills up to an altitude of 7,000 feet. It is of a light brown colour with a series of four dark brown V-shaped marks on the back. Otocryptis beddomii is a rare lizard confined to the hills. Calotes versicolor (Onthu; Oṇṇān) is known as the blood sucker. It is one of the commonest lizards. The male is distinctly larger than the female. In the pairing season the under part of the throat assumes a blood-red colour, whence its popular name. It is quite innocent of the crime which it suggests. It feeds upon insects. When on the look out for insects or a mate it often raises and lowers its body on its legs curiously like a man taking ground exercises. When creepers and trees are in bloom,

the blood sucker judiciously takes a seat among the flowers and snaps up the insects that visit them. The bee-keepers have reason to look upon this lizard with serious disfavour; for, once it takes to bee-eating, it often makes its perch on the bee-hive stand and gobbles up a good number of bees. Mere chasing it off is futile for it returns after a time. The female digs a burrow in the soil and lays its eggs in it. After all the eggs which number about a dozen have been laid, the burrow is filled up with earth and carefully smoothed over to conceal its position. Thereafter there is no parental attention. Calotes grandisquamis is of a green colour. It is recorded from the hills. Calotes nemoricola is green or brownish in colour and occurs in the Ponmudi Hills. Calotes ophiomachus and Calotes rouxi are also green coloured. They occur in the hills and in the low country. Psammophilus blandfordanus (Charasia blandfordiana) is a brown lizard of the hills, but its distribution may extend into the low country as well.

Chamaeleon zeylanicus (Chamaeleon calcaratus) is adapted to an arboreal life. Its green colour makes it inconspicuous among green foliage. The digits of the limbs are arranged in opposite groups of two and three so as to securely clasp a twig. As though to make security of grip doubly sure the tail is prehensile and functions as a fifth grasping organ. The eyes are large and independently movable. It captures its insect prey with its long and sticky tongue which may be extended for about a foot. The female descends to the ground to lay the eggs in a burrow. The lizard occurs in the forest regions.

Fam: Scincidae.

The family Scincidæ is represented by fourteen species recorded from Travancore. *Mabuya bibroni* is a small-sized skink which is recorded from Rajakamangalam in South Travancore. *Mabuya carinata* (Aranei) is the common skink. It occurs all over the country. The com-

mon skink is a pretty lizard with an elongated body and short limbs. It is of a greenish brown colour with a metallic sheen. It usually takes shelter under logs and stones and runs out to pick up insects. Though it commonly occurs in the ground, it may also be seen among the kadjan thatching of low houses hunting for cockroaches. Its tail is brittle and is regenerated if lost. The regrown tail may be occasionally double. It has the habit of protruding and retracting its tongue like a snake and there is a widespread notion that its licking will quickly prove fatal. This is merely a noteworthy instance of error multiplied. Dasia subcaerulea (Lygosoma subcaerulem) is known by a single specimen collected by Ferguson from the Travancore frontiers near Bodinayakanur. It is perhaps peculiar to Travancore. Lygosoma dussumieri is the commonest skink of the low country in Travancore. Its range of distribution extends into the foot hills also. It is a comparatively slender-bodied skink with a bright olive green colour. The tail in the male is bright red in colour and in the female brownish. It is usually mistaken for the young one of the common skink Mabuya carinata. Lygosoma dawsoni is a rare skink recorded from the High Range. Leiolopisma travancoricum (Lygosoma travancoricum), L. beddomei (Lygosoma beddomei), L. laterimaculatum (Lygosoma maculatum) are all skinks found in the hills. Riopa albopunctata (Lygosoma albopunctatum) and Riopa guentheri (Lygosoma guentheri) are also recorded from Travancore. Ristella rurki, R. travancorica R. guentheri and R. beddomi occur in the Travancore Hills. Ristella travancorica was once thought to be peculiar to Travancore, but it occurs in the Tinnevelly Hills also.

The family Lacertide is represented by a solitary species, Cabrita leschenaulti, a small lizard found in the low hills.

Fam: Varanidae.

The family Varanidæ is represented by a single species Varanus monitor (Varanus bengalensis). Its common

vernacular names are 'Udumpu' and 'Neduvāli'. It is the largest of the Travancore lizards. It is of a dull brown colour with the head covered by small polygonal scales. The tongue is long and protrusible with a bifid tip. It is mainly carnivorous feeding upon small mammals, other reptiles, crustaceans, millipedes, large insects, &c. It is common in the forests. It is often hunted with dogs, its flesh being considered valuable for people suffering from wasting diseases. The eggs which may number about thirty are soft-shelled and deposited in a burrow and covered up with dry leaves. There is no further parental care.

Ophidia—The Snakes.

There are seventy four species of snakes recorded from Travancore. Of these, three species appear to be peculiar to the State. They are Rhinophis fergusonianus, Rhinophis travancoricus and Dipsadomorphus dightoni. The seventy four species are distributed among five families, Typhlopidae, Boidae, Uropeltidae, Colubridae and Viperidae.

Fam: Typhlopidae (Koly Pampu).

There are three species of this family recorded from Travancore. Typhlops braminus is common all over the country. It is a small worm-like burrowing snake often seen when digging the ground. It may reach a length of seven inches. It is of a blackish colour which is pale on the under side. The body is cylindrical and covered with shining circular scales. The earthworms form its chief food. During the rainy season, when the burrows get flooded, it is often driven to the surface. Typhlops beddomei is a smaller snake confined to the hills. Typhlops porrectus is the largest of the three, reaching a length of over nine inches. A single specimen of this snake is recorded from Travancore by Fergusor.

Fam: Boidae.

The family is represented by Python molurus, the Indian Python or the Rock Snake (Perum Pāmpu). It is the largest snake in Travancore. It may grow to a length of twenty feet. A specimen from Ashambu Hills measured eighteen feet. It is semi-arboreal. Its colouration is such as to make it inconspicuous against the branch of a tree. It is of a brown colour with large, black-edged, brown spots on the back and sides. It bears the vestige of the hip girdle and hind limbs. The latter project on either side of the vent as a pair of claws. Small mammals and birds form its food. The prey is crushed within its coils before swallowing. The eggs are white and soft-shelled and the mother remains coiled round them till they hatch. The python occurs in the forest country.

Fam: Uropeltidae—(Iruthalai pāmpu).

The snakes of this family are typically burrowing forms with a cylindrical body. The tail is short and blunt like the head, whence the common vernacular name. They are often seen when the soil is dug up. They also hide under stones and logs. They feed upon earthworms. From their burrowing habit they are commonly known as earth snakes.

Three species of Rhinophis are recorded. Rhinophis sanguineus occurs in the Western Ghats. Rhinophis fergusonianus and R. travancoricus occur in the low country as well as in the hills. Rhinophis fergusonianus and R. travancoricus are probably peculiar to Travancore.

The genus Silybura is represented by eight species of which S. pulneyensis, S. maculata, S. ocellata, S. rubrolineata, S. nigra and S. myhendrae are confined to the hills, while S. brevis and S. madurensis occur in the hills and in the low country. They are all small snakes varying in length from thirteen to twenty inches.

The genus Melanophidium is peculiar to Southern India and it is represented in Travancore by a single species, M. punctatum, which is confined to the hills.

Platyplectrurus is another genus restricted to Southern India. It is represented by three species, *P. trilineatus*, *P. madurensis*, and *P. sanguineus*. All the three occur in the hills of Travancore.

Fam: Colubridae.

This is the largest family of snakes. It includes almost all the commonly known snakes. It is divided into three groups according to the structure of the teeth. Aglypha is the group of fangless Colubrine snakes. Their teeth are solid and not grooved. They are all non-poisonous and harmless.

There are twentysix species of Aglypha recorded from Travancore.

Chersudrus granulatus is an estuarine snake occurring in the mouths of rivers and along the coast. It has a stout body reaching a length of three feet and a half. It bears an irregular dorsomedian black band and serially repeated short white bands at the sides. It is piscivorous. Polyodontophis subpunctatus occurs in the low hills. Nerodia piscator (Tropidonotus piscator: - common vernacular names: - "Nīrkōli", "Thaṇṇi Pāmpu") is the common water snake. It is common all over the country in rivers and ponds. During the hot weather it clings to its aquatic home, but during the rainy season it wanders about and may even enter houses not far from water courses. It is usually of a light or dark brown colour with five or six rows of spots on the back. may reach a length of over four feet. It feeds chiefly upon frogs, though its specific name suggests a fish-catching habit. Rhabdophis stolatus (Tropidonotus stolatus) is a small snake which grows to a length of two and a half feet. It is of a brown colour with two longitudinal yellow stripes at the sides. It occurs both in the hills and the low country. Rhabdophis beddomei (Tropidonotus beddommii) is a common hill snake slightly smaller than R. stolatus. monticola (Tropidonotus monticola) is also a hill snake with

a length of less than two feet. Macropisthodon plumbicolor (Tropidonotus plumbicolor) is a pretty snake with a leaf green colour above and a greenish or whitish colour below. It is usually found among the grass where its colour makes it practically invisible when resting. It may grow to a length of about three feet. It is common in the hills though it is recorded from the low country as well. Helicops schistosus indicus is a small brown coloured snake usually seen in the low country among the vegetation near water courses. The genus Xylophis is confined to the South Indian Hills and is represented by only two species, Xylophis perroteti and Xylophis stenorhynchus both of which occur in the State. The former occurs in the High Range, while the latter in the lower slopes of the Ghats, often under stones and logs. Two species of Ophites (Lycodon) occur in the State: Ophites aulicus (Lycodon aulicus:---common vernacular name: Churuta) is a common snake found in the low country. It is usually of a brown colour with white transverse bands; but its colouration is variable. There is an interesting variety which is black with white transverse bands. closely imitates the colour pattern of the fatally poisonous Krait. The resemblance is so close that only the careful scrutiny of an expert can distinguish it. It is no wonder that it is often mistaken for the Krait. It grows to a length of two feet and nine inches. Ophites travancoricus (Lycodon travancoricus) occurs both in the hills and the low country. It is of a black colour with white transverse bands. The colour scheme recalls that of the Krait. is also often mistaken for the Krait. Dryocalamus nympha (Hydrophobus nympha) is a subarboreal snake common in the forest regions. Ptyas mucosus (Zamensis mucosus—common vernacular names:- Chayra, Śareppāmpu) is commonly known as the rat snake, and is probably one of the most familiarly known snakes. It occurs all over the state both in the low country and in the hills. It is most commonly seen by the side of paddy fields and tanks attracted no doubt

by the frogs there which form its staple diet. It, however, feeds with equal relish upon toads and lizards and upon any other small animal which it can overpower. It is known to enter houses for the sake of the rats, and climb trees for the squirrels and birds. In fact, it is most catholic in its tastes in the matter of food. It is of a bright brown or vellow colour and grows to a length of six feet. specimens exceed even that length. Coluber helena is a common snake in the hills. It is a fairly large-sized snake growing to a length of over five feet. Dendrophis candolineatus, Dendrophis grandoculis and Dendrophis bifrenalis (Vernacular name: Kompēri) are all tree snakes which occur in the hills. Dendrophis bifrenalis is recorded from the low country also. Dendrelaphis tristis (Dendrophis pictus) is also a tree snake occuring all over the country both in the hills and the low country. Oligodon taeniolatus (Oligodon subgriseus). Oligodon brevicauda, Oligodon arnensis, Simotes arnensis, Oligodon travancoricus, Oligodon venustus and Oligodon affinis are all small-sized snakes reaching a length of about two feet. They occur in the hills. Liobeltis calamaria (Ablabes calamaria) is a small brown hill snake reaching a length of about a foot and a half.

The second group of the Colubridae is known as the Opisthoglypha. They may be said to be the hind-fanged Colubrine snakes for, the posterior teeth of the upper jaw are modified into grooved fangs. They have small poison glands but the venom is so weak that it has little or no effect even on the small prey on which they feed. Moreover, the fangs are inconveniently located at the hind part of the upper jaw so that they can function only when the prey has passed well into the mouth. They are quite harmless to man. Twelve species of Opisthoglypha are recorded from the State.

Hypsirhina sieboldi is a fresh water snake found in streams and ponds.

Hurria rhynchops (Cerberus rhynchops, Vernacular name: Attu vai pampu) is an estuarine snake. It occurs in

the mouths of rivers and along the coast. It may grow to a length of three and a quarter feet. The genus Dipsadomorphus is represented by five species, D. Ceylonensis, D. beddomei, D. trigonatus (Dipsas trigonatus), D. nuchalis (Dipsas ceylonensis) and D. dightoni. They are fair-sized snakes reaching a length of three to four feet. They all occur in the hills excepting D. trigonatus, an aroboreal snake which occurs in bushes all over the State. D. dightoni has been recorded only from the Pîrmēde Hills and it is peculiar to Travancore. Boiga forsteni (Dipsas forsteni) occurs in the Ghats. It is a large snake measuring, when full grown, a length of seven feet and a half. The genus Dryophis is represented by three species. They are popularly known as the whip snakes as they have a long and narrow whip-like body. They are all arboreal as the general name indicates. Dryophis dispar is a green snake which reaches a length of two feet and a half. It is restricted to the high hills. Dryobhis mycterizans (Pacchai Pampu, Pacchola Pampu, Pacchelai Pāmpu) is the common green whip snake. It occurs in bushes all over the low country. It may attain a length of five feet and a half. It is of a bright leaf-green colour on the upper side and of a pale green colour on the under side. The colour blends so well with the green foliage that the snake is seldom seen when resting on a branch. Its poison is so feeble that even a small frog is not killed by it. It feeds upon small lizards and other small animals. It is known to strike at the human eye when the opportunity occurs, whence it is also known as the "Kankothi Pampu". It is viviparous. Dryophis pulverulentus is the brown whip snake. It occurs in the hills. Chrysopelea ornata is a snake of striking beauty. It is of a blackish colour with a row of four-lobed, bright, red spots on its back. It occurs commonly in the bushes both in the hills and in the low country. It is arboreal and can make long leaps from branch to branch.

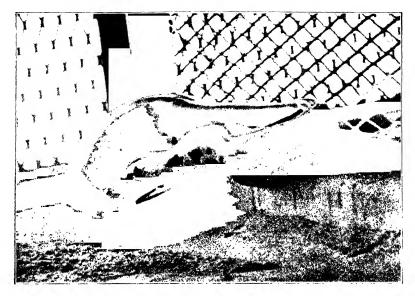
The third division of the Colubridae is known as the Proteroglypha. They may be called the front-fanged

Colubrine snakes. They bear fangs at the front part of the upper jaw. They have well developed poison glands. The poison is virulent and of some, fatal to man. Thirteen species of the Proteroglypha are recorded to occur in the State.

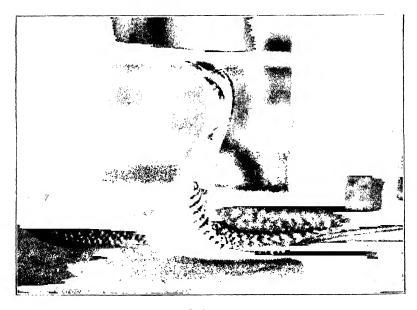
The sea-snakes belong to the sub-family Hydrophinae and seven species are definitely recorded from the Travancore coast. It is very likely that more occur. recorded species are: Hydrus platurus; Leioselasma spiralis (Hydrophis spiralis); Atruria ornata (Distira ornata); Kerilia jerdonii (Distira jerdonii); Astrotia stokesii (Distira stokesii); Enhydrina valakadien and Lapemis curtus (Enhydris curtus). The sea-snakes show adaptations to an aquatic life. Their tails are oar-shaped and their external nasal openings are dorsal. They are all viviparous. Fish forms their food. All of them are fatally poisonous; but strange to say, they are of a gentle disposition. When taken in the net, fishermen pick them up and throw them out. They seldom bite when so handled. The poison of one of them, Enhydrina valakadien, has been estimated to be eight times as potent as that of the cobra.

The rest of the Colubridae belong to the sub-family Elapinae. Bungarus candidus (Bungarus caeruleus; vernacular names: Kāttu Virian; Shanku virian) is a common snake in the low country and in the hills up to an altitude of 4,000 feet. It is of a shining bluish black colour with transverse white bands on the upper side. The lower side is white. The colour pattern is closely imitated by one of the varieties of Ophites (Lycodon) aulicus. The mid-dorsal scales of the trunk and tail are enlarged and hexagonal. It is a deadly poisonous snake, its poison being four times as virulent as that of the cobra. It grows to a length of four feet and a half.

Naia hannah (Naia bungarus: vernacular names: Karu Nagam, Malai Nagam, Karunjāthi), commonly known as the Hamadryad or King Cobra, is second only to the Python



Python.



Cobra.

in size. Specimens with a length of over fifteen feet have been recorded. A skin in the Trivandrum Museum measures fourteen feet and seven inches and a half. It is of a black and blackish green colour and like the cobra bears a hood. It prefers to feed upon other snakes. It is one of the deadly poisonous snakes, its venom being equal to that of the cobra in potency. Naia naia (Naia tripudians, vernacular names: Nāgam, Sarpam, Nalla Pāmpu) is the most familiar of the fatally poisonous snakes. It occurs all over the State both in the low country and in the hills. It is characterised by the hood which is an expansible part of the body immediately behind the head. The hood usually bears a spectacle mark. When alarmed or angered the hood is expanded and the spectacle mark displayed. The exhibition may be useful to warn off its enemies during the day when also many cobras are active. The venom is so potent that a man receiving a lethal dose may succumb in half an hour to three hours.

Hemibungarus nigrescens (Callophis nigrescens) is the common India coral snake confined to the hills. The upper side is reddish brown with three to five rows of spots. The lower side is of a light red colour. It attains a length of four feet. Regarding its poison nothing definite is known, but it does not appear to be fatal to man. Callophis bibronii is another coral snake occurring only in the High Range. It is poisonous but not fatal to man. It is a much smaller snake measuring only two feet when full grown.

Collophis trimaculutus is the slender coral snake which measures a little over a foot in length. It is confined to the hilly parts.

Fam: Viperidae is represented by four species of which the most important one is Vitera russelli (Chēna Thanḍan; Aṇali; Rektha Aṇali; Kaṇṇāḍivirian). It is a large-sized snake which may grow to a length of about five feet. It is found all over the country, more common in the low lands than in the hills. It has a triangular head.

The thick body is of a light brown colour with three longitudinal chains of oval spots. It is nocturnal and slow in its movement. It does not readily move out of one's way. It is fatally poisonous, the venom being about one-third as lethal as that of the cobra.

Ancistrodon hypnale is one of the pit-vipers. (These are distinguished by the presence of a small pit between the eye and the external nasal opening). It occurs in the hills. It is of a brown colour and a full grown specimen measures a foot and a half. Its bite is painful and causes local swelling but does not prove fatal.

Trimeresurus macrolepis is an arboreal pit-viper. It occurs in the hills above 2,000 feet. It grows to a length of two feet. It is of a bright leaf-green colour. Its bite is painful accompanied by swelling but is not fatal.

Trimeresurus anamallensis is another pit-viper also restricted to the hills above an altitude of 2,000 feet. It grows to a fair size reaching a length of three feet and a half. It is of greenish or blackish green colour. The bite causes pain and swelling but the symptoms subside in a few days and never proves fatal.

The distribution of the seventy four species among the five families is as follows:

| 1. | Typhlopidae | 3 | species |
|----|-------------|----|---------|
| 2. | Boidae | 1 | ,, |
| 3. | Uropeltidae | 15 | 77 |
| 4. | Colubridae | 51 | " |
| 5. | Viperidae | 4 | |

Amphibians.

Amphibians, which include Frogs, Toads and Cæcilians, are naturally abundant in Travancore as there is plenty of water. There are 34 species, of which three, Rana aurantiaca, Ixalus Travancoricus and Bufo fergusonii, are peculiar to Travancore. The croaking of the frogs and toads in the paddy fields as the rains set in is a familiar

sound at night. In the low country the largest and commonest frog is Rana tigrina, a great cannibal, of which large specimens may be caught in any tank by using a small one The commonest toad is Bufo melanostictus. Small specimens of this are very partial to taking up their abode under the edge of the matting in any room and here they sit and croak happily till the lights are put out, when they sally forth to feed. Two kinds of "Chunnam frog", Rhacophorus malabaricus and R. maculatus, also come into houses and seat themselves on pictures or in between the venetians or on any other convenient perch and thence make prodigious leaps, the discs on their dilated toes enabling them to stick even to a perpendicular surface. On the hills Bufo parietalis is found in abundance, and five species of the genus Ixalus may be met with. The Carcilians are not so abundant. They are worm-like borrowing Amphibians and are usually found in damp situations. There are three kinds found in Travancore, Ichthyophis glutinosus, Uræotyphlus oxyurus and Gegenophis carnosus.

Fishes.

The fish fauna of Travancore is fairly well known. Though nearly 370 species have been recorded, the investigation cannot by any means be said to be complete, and further survey is bound to add to the number of species already recorded.

Two sub-classes, namely, Elasmobranchii and Teleostai are represented in this region.

These are fishes in which the skeleton is entirely cartilaginous, no bone developing in any part of the body.

The skin is covered with what is popularly known as 'shagreen' (placoid scales) used by cabinet makers for polishing wood. The gill slits open separately to the outside, there being no operculum (gill

cover) as in the *Teleostei*. The pelvic fins in the males are provided with special copulatory organs called 'claspers.' The eggs are of large size which in the viviparous forms undergo development in the uterus. *Elasmobranchs* are all marine and the following are the forms recorded from the coast of Trayancore.

Two dog fishes, Stegostoma tigrinum and Chiloscyllium griseum, are fairly common. The former, when young, is striped with vertical bands of black, and it grows to a length of nearly 15 feet but is quite harmless. Of the three species of Carcharias, the commonest is C. laticaudatus (Scoliodon sorrakowah) which attains a length of two feet. Galoecerdo rayneri, commonly known as the Zebra shark, is an exceedingly fierce, voracious creature and is much dreaded. Two species of the most curious looking Hammer heads or Hammer headed sharks (Zygaena malleus and Z. tudus) of the family Sphyrnidae occur in our coast. In these the front portion of the head is transversely prolonged into lobes, the outer edge of each lobe bearing the eye. Large individuals measuring up to seven feet have been obtained.

The Whale Shark, *Rhinodon typicus*, of similar habits to the Basking shark, occasionally strays into our coast. Like the Basking shark, it has the hab t of lying at the surface of the sea with the upper part of the body exposed. A specimen 27 feet long was washed ashore at Pūntura (Trivandrum) in 1900. Though it reaches the enormous length of over 60 feet, it is quite harmless and its food almost entirely consists of minute planktonic animals.

The kinds of Saw fish, Pristis cuspidatus and P. perrottetti, frequent the Travancore coast. The Saw of these fishes is the snout produced into a long flattened blade with a series of strong teeth, set in sockets along either edge of it. By means of side-to-side sweeps of the saw, these fishes are able to lacerate the bodies of other animals and tear off pieces of flesh from them which they then devour. A saw over 4 feet long is on view in the Trivandrum Museum.

The Rhinobatidae (Guitar-fishes) are represented by three species, (Rhynchobatus djeddensis, R. ancylostomus and Rhinobatus granulatus), which are very destructive to marine Crustacea and Mollusca which form their food. They are subrhombic in form and occupy an intermediate position between sharks and true Rays. The tail is strongly developed and has dorsal and caudal fins.

Rays are well adapted to bottom life by their depressed disc-shaped body with the gill openings (except the spiracles) on the underside and with the reduced tail, sharply marked off from the trunk. The Electric Rays (Torpedinidæ) two kinds of which, namely, Narcine timlei and Astrape dipterygia, are fairly common in our coast and are the most interesting of the Ray group. These fishes possess electric organs capable of benumbing an enemy by means of an electric shock. The organs are large honey-comb like structures placed between the pectoral fins and the head. When an adult specimen is handled, the shock is severe enough to paralyse the hand and arm for a little time.

The Sting Rays (Trygonidae) are represented by four species. They are so called from the fact that their slender whip-like tail is armed with a long saw-edged spine which serves as an effective weapon for inflicting wounds on enemies. Wounds inflicted on men rarely heal without danger of blood poisoning. There was a case in which a fairly deep wound did not heal for nearly 18 months.

The Eagle Rays or Devil Rays (Mylio-batidae) are represented by four genera, Myliobatus, Aetobatis, Rhinoptera and Dicerobatis, each of which is represented by a single species. The long flexible whip-like tail is armed with one or more serrated spines usually smaller than in the Sting Rays. The hexagonal pavement-like flat teeth of these fishes are adapted for crushing the hard shells of molluscs and crustaceans to which they are destructive. A specimen of Aeotobatis narinari taken at Trivandrum in 1906 and which was on view in the Trivandrum Museum was 6 feet 4

inches from tip of snout to root of tail and 4 feet 9 inches across the disk.

Teleostei which include the vast majority of fishes (fresh-water and marine) have a bony skeleton. The gill

openings on each side are covered by a bony flap and the skin is covered with overlapping cycloid scales. This sub-class is represented by nearly 60 families and 345 species.

21 species of Herrings and Sardines of the Family Clupeidae have been recorded. They swim in schools generally near shores and estuaries.

The carps and loaches of the family Cyprinidae are exclusively fresh-water and 34 species grouped under 12 genera have been taken from the rivers and tanks in Trivandrum.

There are 20 species of cat fishes Siluridae about half of which are marine and the others fresh-water. Certain species of cat fishes, such as, Callichrous bimaculatus and Wallago attu, are considered to be excellent as food. Cat fishes are so called from the fact that most of them are provided with whisker-like barbels arranged round the mouth. Most cat fishes can spend a fairly long time out of the water as they are provided with accessory respiratory organs for taking air from the atmosphere. A curious instance of parental care is afforded by certain species of Arius in which the large eggs extruded by the female are received by the male into his mouth where he keeps them till they hatch out.

Eels (Anguillidae) occur both in the fresh water and in the sea. Their snake-like bodies are well fitted for burrowing in the mud or for creeping in and out of holes and crevices in rocks. The typical fresh-water eel (Anguilla bicolor) is well known. Four more species of true eels have been recorded. All true eels spawn in the sea and the infant eel is hatched out in the deep sea far away from land. It is a glassy, band-shaped, little larva markedly different from the adult. Closely allied to the Anguillidae are the Muraenidae which live about coral reefs coiled up in crevices and holes. Five species have been collected of which Muraena punctata and M. tessellata are fairly common.

To the small family of Cyprinodontidae belongs the tiny fish Haplochilus lineatus which has been found to be of considerable value in keeping down mosquito larvae in tanks.

The Sea-Horse (Hippocampus guttatus) and the Pipefish (Syngnathus sp.,) interest us by the quaintness of their form. In Hippocampus found clinging to sea-weeds near the shore at Cape Cōmorin, the head has the form of that of a horse and the thin finless tail is used as a prehensile organ for coiling round sea-weeds. The elongate pipe-fish performing swaying movements is apt to be mistaken for a frond of the sea weeds among which it lives.

In the family Scombresocidae, five species of Garpikes (needle fishes), four species of 'Half Beaks' and three species of Flying fishes have been recorded. Nearly all these are in the habit of making great leaps out of the water, but it is only in the Flying fishes, Exocoetus micropterus, E. evolans and E. bahiensis, that the pectoral fins are enormously elongated and wing-like and serve as a parachute to sustain the fish in the flying leaps over the water.

The Grey Mullets of the family Mugilidae, the Red Mullets of the family Mullidae and the Butter fishes or Pomfrets of the family Stromateidae are much esteemed as food. The little Goat Fish, Upeneus indicus, common at Cape Comorin is one of the Mullidae. The two stiff barbels under the chin of this fish are employed to rake the sand in search of food. The Pomfrets are represented by three species, the White Pomfret, Stromateus sinensis, the Silver Pomfret S. cinereus and the Black Pomfret S. niger.

Fresh-water fishes known as 'Murrel' of the family Ophio cephalidae are valuable food fishes. The numerous

Sea perches of the family Serranidae, some of which are magnificently coloured, the 'Whiting' (Sillago sitama) of the family Syllaginidae and the 'Croakers' or the Jew Fishes of the family Scioenidae are other important food fishes on this coast.

The climbing Perch, Anabas scandens, of the family Anabantidae is a common fresh-water fish. It can live out of water for a considerable time since it has, like the Murrel, a special mechanism for breathing in air. It can travel over grass land and is also credited with the power of climbing trees.

The Gaudy Angel fish, Holocanthus annularis, one of the Butterfly fishes of the family Chaetodontidae, has a vertically broad body coloured sienna with a blue ring on the shoulder and six or seven curved blue bands upon the sides. This pretty fish haunts coral reefs and rocky banks. Heniochus macrolepidotus is another beautiful Butterfly Fish with bold, black and white banding and yellow fins. The long yellow screamer carried by the dorsal fin is characteristic.

The gorgeously coloured, exceedingly alert Damsel fishes (Glyphiodon) of the family Pomacentridae, four species of which have been recorded, are also denizens of coral reefs.

The Pearl spots (Etroplus suratensis and E. maculatus) of the family Cichlidae are found in fresh-water tanks. They thrive also in the brackish waters of estuaries and backwaters. These fishes may be advantageously introduced into such tanks and lakes where they are now absent.

As many as twenty five kinds of Horse mackerels of the family *Carangidae* are represented on this coast. They are recognisable by the presence of two separate spines in front of the anal fin.

Among the true mackerels of the family Scombridge are the 'Seer fish' of the genus Cybium (Cybium guttalum), one of the best edible fishes, and the 'Tunnies', Thynnus thunning and T. pelamys which grow to a length of six feet.

The bright silvery ribbon-shaped 'Hair tails' or scabbard fishes of the family *Trichiuridae* are caught in numbers in certain seasons and dried in the sun and salted. A caudal fin is absent in these, the tail ending in a hair-like filament.

The great Sword fish (Sail fish), Histiophorus gladius, an occasional visitor to our coast, deserves mention. It grows to a length of 12-15 feet and is conspicuously aggressive, attacking whales and other cetaceans and even vessels by its strong snout prolonged into a spear-shaped rostrum. Its undivided dorsal fin is very high and the monster may occasionally be seen sunning itself on the surface with its blue dorsal fin fully extended like a great sail. The plaster cast of a specimen on view in the Government Museum is about ten feet long and the dorsal fin is 21 feet high. Ferguson says that "cases of injury inflicted by H. gladius on unfortunate fishermen have been treated in the hospital at Trivandrum. In one of these, about nine inches of the sword were taken from the fleshy part of the shoulder of one man, who, while sitting on his catamaran, had been wantonly attacked". H. brevirostris is occasionally found.

Twelve species of Flat fishes (Pleuro-nectidae) have been collected from the Travancore coast. These are grouped under five genera, Synaptura, Cynoglossus (sand sole), Psettodes (Indian Turbot), Pseudorhombus (Tile fish) and Plagusia (Indian sole). The young of all these have symmetrical bodies with an eye on each side and swim normally in a vertical position like other fishes. As they grow, an extraordinary transformation takes place. The anterior part of the head gets twisted and both eyes are brought to the same side. The adults swim horizontally, the coloured upper side bearing the eyes being either right or left,

Nine species of Gobies (Gobiidae) belonging to the three genera, Eleotris, Gobius and Apocrythis, occur in rocky

coasts at Kōvalam, Colachel and Cape Cōmorin. They may be found clinging to rocks by means of a ventral cup-like sucking disk formed by the fusion of the pelvic fins.

Blennies or rock skippers of the family *Blennidae* also occur in rock pools where they may be found leaping agilely from rock to rock with the help of their short pelvic fins padded with muscle. The only genus is *Salarias* with four species.

In the curious sucker fish, *Echeneis*, two species of which (*E. naucrates* and *E. remora*) are common on our coast, the first dorsal fin is modified into a peculiar oval adhesive sucking disk covering the whole top of the head and nape. By means of this powerful disk, these fishes are able to anchor themselves to sharks, turtles, and even vessels and enjoy free rides from place to place.

The Scorpion fishes (Scorpoenidae) ten species of which are found in our sea afford excellent examples of protective mimicry. One should see them in their natural surroundings to appreciate their mimetic form and coloration. They are dreaded as the stings from their clongate dorsal spines are poisonous. Representatives of the five genera, Scorbaena, Pterois, Apistus, Gymnopistus and Minous, have been recorded. Pterois russelli has long dorsal spines and enormously developed pectoral fins with deeply frilled edges. The movements of this fish are very slow, deliberate and exceedingly graceful. Hornell describes its movements thus:- "The fish's movements are those of the mannequin on show; when it swims, it sails along very slowly and gracefully with a just perceptible fluttering of the great butterfly-like fins; it often halts for quite a considerable time as though asking for admiration and at times will even slowly rotate that one may view it from all points".

Five species of "File Fishes" belonging to the family Balistidae have been known to occur between Cape Comorin and Trivandrum. The popular name is due to the presence in these fishes of a large file-like spine in the first dorsal

fin. One of these fishes, Balistes erythrodon, known as 'the Blue File Fish', is very pretty and has red teeth.

The Flying Gurnard (Dactylopterus orientalis) with its long wing-like pectoral fins, the curious looking Star-gazers, Uranoscopus guttatus and Icthyoscopus inermis, with their eyes close together on the upper surface of the head, and the Angler fish, Antennarius mummifer, lying in wait for his prey at the bottom of coral reefs, moving only his fishing rod (the modified first dorsal fin ray), are among the queer inhabitants of the sea.

No less queer are the 'cow-fish' of the genus Ostracion 'puffers' of the genus Tetradon and the Sea Hedgehogs of the genus Diodon, all of which occur on our coast.

The cow fishes or trunk-fishes have their body encased in a bony box (three to five ridged) composed of numerous mostly hexagonal bony plates. They have sometimes two horn-like projections in front above the eyes giving them bovine appearance and two on either side behind the origin of the caudal fin. Four species of Ostracion are found in shallow water at Cape Cōmorin.

The 'Puffers' or globe fishes have a parrot-like beak and the skin is either naked or covered with spines. They are able to puff out their body like a balloon by swallowing air and float on the water, abdomen uppermost. Six species of Puffers (Tetradon) have been recorded from Cape Cōmorin and Trivandrum.

In the Sea hedgehogs the body is covered with strong movable spines. When they inflate themselves, they are unable to swim. So they come to the surface, lie on their backs and allow themselves to be carried along by the tide. Two species, *Diodon hystrix* and *D. maculutus*, are common.

The Sun fish or Head fish, Ranzania truncata, a rare visitor to our coast is a truly bizarre fish, and Nature must surely have been in a sporting mood when she made this fish. The body is so abruptly truncated posteriorly that the animal looks as if it has been amputated just behind the

head, and the dorsal, anal and caudal fins all seem to be attached to the hind end of the head.

Invertebrates.

This division of the animal kingdom includes Molluscs (snails, oysters, cuttle fishes, etc.), Arthropoda (Crustaceans, insects, spiders, scorpions, etc.), Annelids (Bristle worms, earthworms, leeches, etc.), Echinoderms (Star fishes, Sea urchins, etc.), Coelenterates (Anemones, jelly fishes, corals, etc.), Porifera (Sponges) and Protozoa (minute single-celled animals). Besides, it includes a number of minor groups such as Round worms, Tape Worms, Rotifers, Polyzan, etc. As no complete faunistic survey of these groups has been made in Travancore, only a short descriptive mention of the more outstanding forms of the two major important phyla, Mollusca and Arthropoda will be attempted in this account.

Molluscs are soft-bodied animals the great majority of which are protected by a limy external shell. The shell of molluscs are of various shapes and colour-Mollusea. ing. Molluscs are divided into three main classes, viz., 1. The Bivalves (Pelecypoda) in which the shell is formed of two similar pieces, 2. The Castropods in which the shell is composed of a single piece coiled into a spiral. and 3. The active Cephalopods which comprise squids, cuttle fishes and octopods. Besides these, there are two smaller classes, (1) Amphineura in which the shell is either absent or composed of a series of plates, and (2) Scaphopoda which possess a long tapering tubular shell. The vast majority of molluscs are marine. All the five classes are represented in Travancore, but only a few of the more common representatives of each group will be mentioned in this account.

1. Amphineura. This class is represented by two species of Chitons or "coat of mail shells". Chitons live on rocks in shallow water, firmly adhering to them by means of their broad sole-like muscular foot. They resemble wood,

lice in appearance and like them roll themselves into a ball when detached from their anchorage. The shell is composed of eight plates arranged in a single row. The plates are arched above and overlap like the tiles on a roof. Ischnochiton herdmani, a large chiton, over two inches in length, is found at Cape Cōmorin. Plaxipora indica is a small form occurring at Kōvaļam, Cape Cōmorin and other rocky coasts.

2. Gastropoda. Most members of this class possess a shell. The shell is mostly spirally coiled in correlation with the coiled body of the occupant. The mouth of the shell in most cases can be closed by a limy or horny lid (operculam) attached to the hinder part of the foot of the animal.

Two species of limpets, Patella variabilia, and P. rudis are found between tide marks on rocks at Kōvaļam and Cape Cōmorin. They adhere so firmly to rocks by their broad sucker-like foot that it is very difficult to detach one from its foot-hold. By means of their ribbon-like, toothed tongue they browse on small sea-weeds growing on rocks. A slit limpet of the genus Emarginula (E. notata) has been collected from Cape Cōmorin. It lives in deeper water than the limpets.

Two species of Top Shells, Trochidae (Trochus radiatus and T. costatus) are common at Cape Cōmorin, the former fairly abundant. The empty shells of Euchelus tricarinata, one of Trochidae, are used by small hermit crabs as their portable habitations on the sandy beach at Cape Cōmorin. The turban shell, Turbo margaritaceus of the family Turbinidae, is fairly abundant. The shells of both Trochus and Turbo are thick and very pearly within, and the large-sized species of these, obtainable elsewhere, are used for button making. The operculam of Turbo is plano convex, massive and stony and is collected in numbers by the local fisherfolk and sold to pilgrims and visitors. Nerita albicella and Niplicata have been collected from shallow water but are by no means common.

Vivipara dissimilis is a fresh-water snail with a shell like that of Turbo but thin and olive-green outside. The familiar edible apple snail, Pila globosa (Ampullaridae), is abundant in rice fields and ponds everywhere in Travancore. It is an amphibious snail having both a gill and a lung. Masses of its round white eggs may be found in rice fields and on the shores of tanks. Telescopium fuscum with its long spirally coiled pyramid-like shell is abundant on the muddy shores of backwaters as also Cerithium granosum and a species of Potamides.

Three species of *Mclania* and five species of *Paludomus* have been recorded from fresh water from varying elevations.

Screw shells of the genus *Turritella* are cast upon the beach in places on our coast. The lovely, violet-blue delicate shells of the pelagic *Ianthina* with their occupants are sometimes drifted ashore in fairly large numbers.

The cowries (Cypracidae) are represented by Cyprace moneta, C. arabica, C. occilata, C. felina and C. isabella, living on rocky ground in shallow water. Of the Triton Shells, two species of Ranella (R. granifera and R. tuberculata) occur at Cape Comorin and specimens of the staircase shell Solarium have been collected from the sandy beach in the same locality.

The sacred chank, Turbinella pirum, occurs in fairly large quantities in South Travancore off the coast of Vilinjam and Kōvalam at a depth of nearly eight fathoms. Large numbers are fished up every year and exported to Bengal where they are sawn and made into bangles, rings, etc. A species of Bullia (B. Vittata), one of the Nassidae, is found in large numbers on the sandy shore of Kōvalam, crawling over wet sand with their broad leaf-like foot, after being disturbed by each retreating wave. The whelks (Buccinidae) are represented by Eburna spirata with its smooth white shell brightly blotched with red and the small Engina sea found in large numbers on rocks.

The purples (Purpuridae) are represented by two species, Purpura (Thais) rudolphi and P. bvfo, both of which are common on rocks between tide marks. The empty shells of these are used by hermit crabs. The little Sistrum tuberculata and Columbella trepsichorda are two tiny gastropods (of the families Muricidae and Columbellidae respectively) seen in large numbers on rocks constantly washed by the waves. Oliva gibbosa with its beautiful, highly polished shell of marbled colouring is fairly common at Muttam and Cape Comorin as also the smaller O. nubulosa and Ancilla cinnamonea.

Shoals of *Creseis*, one of the wing-footed pelagic sea butterflies (*Pteropoda*), with a glassy quiver-shaped shell have been observed off Colachel and Trivandrum. Though these small delicate creatures swim with the aid of their wing-like fins, they are at the mercy of the waves.

Several kinds of Nudibranchs have been noted on this coast but they have not been properly identified. A kind of small *Doris*, whitish with black spots, has been obtained from Cape Cōmorin and a fine specimen of *Tethys* with leaf-like cerata has been observed at Kōvalam.

The dark-banded white Helix (*Helix vittata*) is found in large numbers at Cape Cōmorin and neighbouring places on acacia, portia and other trees and on cactus bushes. Throughout the hot summer months they æstivate, closing the mouth of their shell by a mucous secretion which hardens and forms a sort of lid preventing evaporation from the body. A species of *Ariophanta* is common in the low country, while a large-sized one occurs at Ponmudi.

A species of the wheel snail (*Planorbis*) with the shell coiled into a flat spiral and a species of the thin-shelled Limnæa are both very common among vegetation in all tanks.

The black slug *Vaginulus* is fairly common in moist situations in gardens and abundant in places, doing damage to the leaves of plants.

- 3. Scaphopoda. The class Scaphopoda is represented by Dentalium octogonum whose pretty shell curved like an elephant's tusk may often be found washed ashore.
- 4. Pelecypoda (Bivalves). Mytilus viridis, the green mussel, which covers the sheltered surfaces of rocks at Kōvalam and Vilinjam is collected by fisher-folk and eaten. The Brown mussel, larger in size than M. viridis, occurs at Colachel and Muttam on rocks from low tide level to a depth of about three fathoms. Species of Modiola is also common in all these localities.

Two species of Oysters occur in Travancore, the Backwater oyster (Ostrea virginiane) growing in abundance in Vēmbanād lake where it forms fairly extensive beds, and the Rock Oyster (O. cucullata) forming densely crowded colonies on rocks between tide marks at Kōvalam and Vilinjam. The flesh of the former is eaten, while the latter, though edible, is not used due to the difficulty in opening their shells because of their firmly interlocking edges. The rock oyster is firmly attached to the rock by its deep cup-shaped left valve and the interlocking edges of the valves are so sharp that they lacerate the soles of the feet of the unwary barefooted collector.

Lamellidens marginalis, the common fresh-water mussel, is found plentifully on the beds of the rivers, in tanks, etc. The pearly layer of this mussel, though thin, is useful for button making. Meretrix ovum occurs in abundance in the backwaters of Travancore. Besides being an important food molluse, the thick valves of this clam are used for making lime. The ship worm Teredo, a bivalve molluse specialised for boring into wood, attacks wooden piles of jetties, canoes and boats that ply over backwaters and canals, doing considerable damage to them.

5. Cephalopoda include Octopods, cuttle fishes, squids, Nautilus, etc. Two species of Octopods, two species of cuttle fishes and a squid have been observed on this coast. A kind of small Octopus has been taken from under rocks

at Cape Comorin as well as a larger species which appears to be somewhat rare.

A species of edible squid (Loligo) is very common at Trivandrum during certain seasons, when it may be seen moving in immense shoals. They are then caught in large numbers and brought to market for sale. Squids are active swimmers with a long torpedo-shaped body and well-developed side fins. The thin and horny internal shell is dorsal in position and in shape looks like a small quill pen. Like octopods and cuttle fishes, the squid also has an ink sac secreting an inky fluid. The animal is, therefore, known popularly as "the pen and ink fish".

The common Indian Cuttle fish occurs in fair abundance during certain months of the year and its 'cuttle bone' is thrown up in large quantities on the shore. The cuttle bone which in the living animal lies just beneath the skin of the back is made of numerous overlapping limy plates. It is used for cleaning glass and for rubbing down paint in fine coach work. It also forms the basis of many powders used in pharmacy. The 'ink' of Sepia is manufactured into Sepia paint used by artists and draughtsmen.

Arthropoda is a very large group comprising six classes, Insecta, Myriapoda (centipedes and millipedes), Arachnida (Scorpions, Spiders, etc.), Crustacea (crabs, Lobsters, etc.), and Onychophora (Peripatus). Onychophora are not represented in Travancore.

Though the forms already known are numerous, our faunistic knowledge of this vast group is far from complete,

Insecta.

and only a few of the common forms belonging to each of the nine principal orders will be dealt with in this account.

^{1.} Orthoptera. This order includes Earwigs, Cockroaches, Mantises, Stick and Leaf Insects, Grass-hoppers and Crickets.

Earwigs (Forficulidae) are easily recognised by the fact that they bear at the end of the abdomen a pair of forceps. Their front pair of wings are very short, rarely covering more than the base of the abdomen, and the large thin hind wings are folded in a complicated way. Earwigs are found under bark, under stones and flower pots and in similar damp situations. Several species occur in Travancore, which belong chiefly to the common genera Labidura and Forficula. Maternal solicitude is exhibited by some species of Earwigs. When a flower pot in the garden is lifted, it is not uncommon to find a mother Earwig brooding over her small cluster of eggs.

Cockroaches (Blattidae). The common household species are Periplaneta americana, Periplaneta australasiae, and the large brown wingless Stylopyga rhombifolia with varied yellow markings. Leucophoea surrinamensis, a small thick-set insect with the pro-thorax and the wing covers brown, is also common. The beautiful Corydia petiveriana whose black front wings have large white spots is found on the hills. The wingless wood-louse like Heterogamia occurs at Kallar and Ponmudi.

Praying Mantises (Mantidae) have the pro-thorax very long and the fore-legs modified for the purpose of seizing other insects that form their food. The spiny tibia can be folded back on the spiny femur like the blade of a knife on its handle and any insect caught between this is held firmly and brought to the mouth to be eaten. Eggs are laid by the female in a large egg case fixed to a plant. Gongylus gongyloides is a queer insect fairly common in the plains. It sometimes simulates a flower by assuming a particular attitude and unwary flower haunting insects are deceived and fall into its clutches. Hierodula species is the robust green mantis common in the low country. Schizocephalus bicornis, a very long slender green insect with slender long legs, resembles a blade of grass and is a remarkable instance of mimetic form and coloration.

Stick and Leaf Insects (*Phasmidae*) are even more wonderful than mantises. They escape detection by their remarkable likeness to dry twigs and green leaves. Unlike mantises these are strict vegetarians. They lay eggs singly dropping them like seeds on the ground. *Pulchriphyllium* (*Phyllium*) scythe is the only leaf insect found here and is not very common. The body is flat and the wings are green and veined so as to look exactly like a green leaf. Two or three kinds of Stick Insects are found but have not been properly determined. A giant Stick Insect (probably a species of *Lonchodes*) about a foot in length, looking exactly like a dry twig, is found on the hills.

Short-horned grass-hoppers (Acrididae). These true grass-hoppers have short antennæ and long leaping hind limbs. The colour is usually cryptic, harmonising closely with the natural surroundings. The familiar chirping sound is produced by rubbing the row of raised knobs on the inner face of the femur of the hind-leg up and down against a projecting vein on the outer face of the tegmen. The tegmen is thus made to vibrate and the sound is produced. Eggs are laid in the soil in a compact mass. There are two migratory locusts in India, Acridium perigrinum and Cyrtacanthacris succinta, which periodically form swarms, fly from one place to another and make a wilderness of the places where they alight. Neither of these occurs in Travancore though a species of Cyrtacanthacris is fairly common. Pachytylus cinerascens, though known to form swarms and migrate in Europe, does not fortunately swarm here. A few species of the rough and warty Chrotogonus are found commonly in the ground but none are injurious. The slender Tryxalis turrita with produced head and flattened antennæ, Epacromia dorsalis and Oedaleus marmoratus are among the other common forms. The warningly coloured Aularches miliaris is found in the lower hill slopes and occasionally in the plains. It is a highly ornamental grass-hopper dark green in colour, with rough wing covers

and thorax and with yellow spots on the wing covers. *Hieroglyphus banian*, commonly known as the Rice grass-hopper, is sometimes destructive to paddy.

The long-horned grass-hoppers (Locustidae) are distinguished from their cousins, the Acrididæ, by their long slender antennæ. The females have a long slightly curved sword-like ovipositor. The characteristic sharp shrill sound is produced by rubbing the file on the base of the inner surface of the left tegmen across a sharp ridge on the upper surface of the right tegmen. Some are coloured green, the veins on their broad tegmina resembling the veins on a green leaf. Others are grey and are found on the bark of trees.

Holochlora albida is the large green form with broad leaf-like wings commonly found on bushes. Mecopoda elongata, a large, dark brown, locustid of the dead leaf tint is also fairly common. The large, flattened, bark-coloured, curious looking, Sathrophyllia is found sitting motionless on the bark of trees but it is often missed due to its remarkably cryptic coloration.

Crickets (Gryllidae)—The shrill chirping noise is produced in the same way as in the long-horned grass-hoppers. It is only the males that can utter the sound. Gryllotalpa africana, the common mole cricket, is of burrowing subterranean habits and its fore-legs are remarkably modified for digging. It is a very minor pest in gardens where damage is sometimes caused to the roots of plants by its burrowing near the surface. It flies at night and is often attracted by light. A species of Gryllus is very common in houses, while there are two or three burrowing forms in the fields of the family Gryllinæ. Liogryllus bimaculatus is a black cricket usually found under stones, logs, etc.

Order Neuroptera. This order includes Dragon flies, may flies, stone flies, Termites, etc.

Dragon flies are abundant throughout the country but no systematic collections have been attempted with a view to find out the species that occur. A number of

species belonging to the group Anisopterides which hold the wings horizontally outwards from the body when at rest and in which the hind-wings are broader at the base than the fore-wings occur in Travancore. Many species belonging to the group Zygopterides in which the hind-wings are small and which, when at rest, hold the wings closed together vertically above the body are also known to exist both in the low country and on the hills. Dragon flies are all predaceous, feeding on smaller insects which they capture on the wing and they play an important part in the destruction of small winged insects. Eggs are laid in water usually in a mass enclosed in a gelatinous envelope. Like the adults the larvæ also are predaceous, the teeming life of our tanks and ponds supplying them with plentiful food.

Ant lions (Myrmelionidae) are familiar insects. The larvæ usually live in funnel-shaped pits which they construct in dry sand. The larva remains motionless at the bottom of the pit with only its sickle-shaped jaws protruding, ready to seize any unwary ant slipping down the loose sides of the pit. The adult resembles a dragon fly but can be easily distinguished by the short club-shaped antennæ and the large wings of equal size often marked with brown and black. Two species are common in the plains and they are both attracted by light and come into houses at night.

Among the rare Neuroptera that occur here are (1) a species of *Corydalis*, one of the stone flies of the family Sialidæ, with large sickle-shaped mandibles, (2) a species of *Mantispa* in which the fore-legs have the tibia bent back upon the femur as in the mantises and (3) a species of remarkable Neuropteran, *Nemoptera*, in which the hind-wings are very long and almost filament-like. The last named occasionally comes to light at night.

Though Termites are popularly called White-ants, they are only as much related to ants as mice are to men! Space will not permit a description here of their marvellous social life and organisation rivalling even that of true ants.

The common termite so destructive to wood in buildings is *Termes obesus*. On the hills a species may be seen which tunnels into the branches of trees and makes its nests round them. The queen of this latter species is very much smaller than that of *T. obesus*.

Order Hymenoptera. (Ichneumons, Ants, Bees, Wasps, &c.) A number of insects belonging to this order live as parasites on insect pests of cultivated plants and are helpful in checking their increase. As biological control of crop pests is coming into prominence in India, a complete investigation of the parasitic Hymenoptera in this country and the part they play in checking the increase of the insect pests of our crops will be amply repaid. Honey Bees are of economic value not only because they give us honey but also from the part they play in the pollination of flowers.

Among the parasitic Hymenoptera may be mentioned the small Chalcid wasps parasitic on the eggs, larvæ or pupæ of all groups of insects; Ichneumon flies; and the Braconids whose larvæ are parasitic chiefly on caterpillars. Several species of these are found flying about in houses, looking out for the egg capsules of cockroaches in which the female lays her eggs. A species of bright metallic-green cuckoo wasp (Chrysidae) is also common in houses.

Of the *Mutillidae* commonly known as the Velvetants, the genus *Mutilla* is represented by one species. The brightly-coloured wingless female looks like an ant and may be found on the ground.

The members of the family Scolidae (Hairy Flower wasps) resemble true wasps (Vespidae) and their colours are warning. Some are among the largest of Aculeates. One of the largest is Scolia indica, a large, black, hairy insect with thick legs and some red bands on the abdomen. The wings are fuscous, brown with beautiful purple reflections. The young are parasitic on the grubs of ground beetles. The wasp burrows in the soil till it finds a particular kind of grub, stings and paralyses it and lays an egg on it.

The Pompilidae (Sand wasps) can be recognised by their long legs. They run rapidly over the surface of the ground and most of them dig little pits in which they store the prey selected for their young and seal up the pits after laying their eggs. Macromeris violacea is a good example; a black insect with shining dark-brown wings. It stores spiders in holes for its young. Salius flavus is another common pompilid. It has an yellow body with yellow wings, the apex deep purple-black.

The family Sphegidae includes the familiar digging wasps some of which are large and robust, others small and slender. They paralyse insects by stinging them and store them in this helpless state in a suitable cell or hole for the young to feed on. Liris aurata is a beautiful active wasp, black with more or less red legs and with silvery bands on the abdomen. It is common in most places. It makes its nest hole in the ground and stores it with young housecrickets. Trypoxylon pileatum is a very slender black wasp with a long body. It makes mud nests in furniture or in any convenient crovice, and stores it with small spiders. T. intrudens is very similar to T. pileatum and has similar habits. Three species of Ammophila are common at Trivandrum. These have a very slender waist and an abdomen much compressed at the upper part. They do not make mud nests but make vertical tunnels in the ground and store them with caterpillars and spiders.

Four species of *Sceliphron*, robust mud wasps which lay up spiders in earthen cells, are found in Trivandrum, of which the commonest is *S. madraspatanam*, a black insect with a long, slender, yellow waist and yellow and black legs. Its nest, often built on a wall, on the side of a table or in the corner of a glass pane of a window, looks like a mere lump of mud. When the nest is opened, it is seen to consist of three to six cells placed side by side and filled with spiders. The unfinished cells are pretty but when the cells are completed and when they have been stocked and

closed, the wasp applies mud over the whole nest in an irregular manner so as to give it the appearance of a mere splash of mud. A fine example of camouflage! The genus Sphes is represented by seven species of which S. lobatus is the most striking with its brilliant blue green body and transparent wings. Ampulex compressa is another beautiful Sphegid. It is brilliant metallic-blue with some deep red on the legs and with slightly clouded transparent wings. This wasp does not build a nest but makes use of some empty hole on the trunk of a tree and lays up cockroaches in it.

Bembex sulphurescens is a robust black insect with yellow bands on the abdomen. It makes its burrow in sandy banks but does not store it with food for the young which it feeds daily with fresh food in the form of flies.

Eumenidae are the solitary wasps, commonly known as the "potters" or "masons". They are mostly warningly coloured and the females are provided with a powerful sting. Eumenes is the important genus with several species in Travancore, E. petiolata and E. conica being the commonest, all large conspicuous insects with elongated waists. They build mud cells in houses and store them with caterpillars. Another common genus is Rhynchium. R. brunneum is a brownish red wasp with black bands on the abdomen. Its habits are similar to those of Eumenes. These wasps are a nuisance in houses owing to the spots chosen for cell construction.

Vespidae include the social wasps. They differ from the solitary wasps in the fact that they actually feed their young. They are all ferocious and their stings are very painful. Nests are made of papery material consisting of chewed vegetable fibre. The cells are more or less hexagonal and are open below. Each cell houses a single larva which is fed on food brought home by the workers. Icaria ferruginea is a very common species. It is red-brown with an

yellow band across the second abdominal segment. The nest consists of a small number of elongated cells attached by a pedicel to twigs. Polistes hebraeus is another common yellow wasp whose nest is composed of two or more horizontal combs of cells, one comb below another, but the combs are open all round. Vespa orientalis is the large black wasp with a broad, yellow band on the abdomen. Its very large nest is often seen in old buildings or on trees. It is a ferocious creature and proves dangerous if disturbed. The combs are completely enclosed by an envelope.

The family Apidae includes both social and solitary bees. Among the solitary bees are Megachile lanata, Xylocopa latibes and X. bryorum. Megachile lanata is one of the leafcutting bees. It is a black insect with the base of the abdomen red-brown and with narrow transverse white bands on the abdomen. It cuts neat, almost circular pieces off the leaves of rose and other plants in the garden and uses them to line its mud cells. Xylocops are the carpenter bees so called from their habit of making tunnels in hard dry wood in which they make their nests. X. latipes is the large hairy carpenter bee, black all over with dark shiny wings, and X. bryorum is yellowish in front and has a black abdomen and more are less dark wings. Anthophora zonata, rufous in front with a black abdomen on which there are narrow bands of metallic blue, nests in the soil. The Honey-bees belong to the genus Apis, of which there are three species in Travancore:— Apis dorsata, A. indica and A. florea. A. doreata known as the Rock-bee is the largest and is found in the hills. It constructs a single comb about three feet wide and deep, suspended under the horizontal branch of a tree. Apis indica is domesticated. It is intermediate in size between the Rock and the little bees. A. florea is the little bee. It builds a small single comb in any convenient position. A species of the small dammer bees of the genus Melipona builds its nests in the hollows of trees. They are called Dammer-bees from the dark resinous wax they use in making their nests.

Ants which form another tribe of the Hymenoptera are numerous, there being over sixty species in Travancore. They live in large communities consisting of a queen, a perfect female, imperfect females which may include workers of two kinds and soldiers, and of young, the latter comprising all these forms and also perfect males. At certain seasons, generally after the first showers in April or May, the perfect males and females, which are winged, emerge from the nest and rise into the air for their nuntial flight; the couple and the males die, while the females cast their wings and are ready to lay eggs. They are divided into five sub-families. The first of these, the Camponotide, have no true sting but are able to produce an acid poison and to eject it to some distance. The best known of all is the "red ant", (Ecophylla smaragdina). This forms shelters in the leaves of trees or bushes by fastening the edges together by a silky substance. The mature ants are unable to produce this but the larvæ can, as they spin a silken cocoon for themselves in which to pupate; when therefore it becomes necessary to form a new shelter, or to mend a damaged one, some of the mature workers hold the edges of the leaves close, while others carry a larva each in their jaws, apply the mouth of the larva to the edge of the leaf and the sticky secretion from it fastens the leaves together. The larvæ are not damaged by this operation but are carefully laid by when done with. A small yellow ant, Plagiolepis longipes, which has, as its name implies, very long legs, is very common in houses. Companies of them may be seen dragging any dead insect up a wall to its nest. Prenolepis longicornis is an equally familiar ant but is black; it has no settled home and does not frequent houses so regularly as the last. The large black ant that forms vast nests underground is Camponotus compressus. They are regular cattle keepers as they keep herds of caterpillars of

certain families of the Lycænid butterflies which include the Blues and Coppers. These have two erectile tentacula near the end of the body and close to them is an opening from which exudes a sweet liquor that the ants very much appreciate. When an ant wishes to milk the caterpillar, it gently strokes it with its antennæ and a drop of liquid exudes, which the ant licks up. The ants regularly attend the caterpillars and, when they are about to pupate, conduct them to a safe place in which to undergo transformation, and do not allow them to stray too far. They also attend and herd plant-lice or aphides. There are five species of the genus found in Travancore. The nests of ants differ very much, but those formed by a genus of ants called Polyrachis are peculiar in that they consist of a single cavity which is lined with a silky substance. They are built on leaves usually. There are four species known from Travancore. The next family of the Dolichoderides is a small one, of which the most familiar member is a small ant, Tapinoma melanocephalum, with a black head that contrasts with the semi-transparent abdomen. It has no sting, nor power of ejecting fluid to a distance, but it secretes a very strongly malodorous fluid from the anal glands which it uses for defence. Among the next sub-family are some of the most elaborate nest builders; Cremastogaster rogenhoferi builds a more or less round brown-papery nest of vegetable fibre, often eighteen inches long and almost as broad. round a branch which it uses as a central support. These nests may be seen commonly on the hills. The ants have a curious habit of turning their abdomens over their backs. There are some species of ants that make roads for themselves and the result of their labours may be seen in partial tracks and tunnels running across the paths. Of these the commonest is Solenopsis geminata, a reddish yellow ant. Holcomyrmex criniceps, a brown ant also has this habit. Both of them store grass seeds in their nest, but ants of the genus Phidole are the best known harvesters: round the

entrance to their nests may be seen the husks of the seeds they have stored below and to prevent rain penetrating to their galleries they make embankments round the nests which effectually protect them. There are four species in Travancore of which *P. rhombinoda* is the commonest. To this family also belongs a very small reddish-yellow ant, *Monomorium destructor*, which is commonly to be met with in houses.

The next family, the *Ponerina*, are hunting ants and are flesh eaters. They have a curious way of carrying their prey underneath their bodies between the fore-legs. There are several genera represented in Travancore, of which the best known is *Lobopelta*; long lines of *Lobopelta Chinensis* may be seen going, usually in single file, on foraging expeditions about four in the evening. They haunt by night and by eight in the morning they retire underground. They have a very fairly powerful sting which they use freely if disturbed. There are also *L. dentilobis*, *L. dalvi* and *L. ocellifera* which behave in the same way.

The last family is the Dorylides; they lead a nomadic social life notwithstanding the fact that the eyesight of the workers is very imperfect. It includes the genera *Dorylus* and (*Oenictus*) of the latter there are four species in Travancore. They are small ants and march three or four abreast with great regularity carrying their prey as does Lobopelta.

Order Colceptera. (Beetles). Beetles are easily recognised. The anterior wings are hard and horny and do not serve for flight. They fit closely together in a straight line along the middle of the back and form a pair of covers for the protection of the large, thin hind-wings when not in use. Beetles are of all sizes and their habits and modes of life vary enormously. A large number of genera are represented in Travancore.

A species of Basilianus (a Passalid beetle), shiny black in colour with the elongate elytra having ten longitudinal

lines of punctures, is common in forests. The stag beetle, Odontolabis cuvera, is common on the hills. The mandibles of the male are enormously long and project forward as two large and formidable jaws. Among the Dung-rollers may be mentioned the giant Heliocopris bucephalus, one species of Sacrabaeus (Ateuchus) and a species of the metallic-blue Gymnopleurus. Species of Anomala and other chafers are The Dynastid beetle, Cryctes rhinoceros, with a horn on the head like that of rhinoceros, is a pest of coconut and other palms in Travancore. This beetle eats into the soft tender tissues of the growing apex of the palm and. when the attack is very bad, the growing bud dies, growth is stopped and the tree withers. A species of dark metallicblue Heterorrhina and other brilliantly coloured Cetonid beetles are found on the hills and less commonly on the plains also.

Tiger beetles (Cicindelidæ) most of which are brilliantly coloured are extremely active creatures which hurt and devour other insects. Cicindela sex-punctata is common in rice fields where it preys on the destructive rice bug Leptocorisa varicornis C. 4. Lineata is found abundantly on the sea shore and a species of metallic-blue Collyris is fairly common in the plains and in forests.

Of the ground beetles or Carabidæ, a species of Calosoma is fairly common in Trivandrum. Pheropsophus bimaculatus, a dark blue beetle with yellow markings, and a species of Brachinus have been designated 'Bombardiers', as they have earned a notoriety by their ability to discharge a volatile offensive fluid in the face of their foes. The large black Anthia sexguttata with six large white spots is not uncommon. It is wingless and found wholly on the soil. A species of the Paussid beetle, Platyrhopalus, easily recognised by its large extraordinary antennæ and truncate elytra, comes to light in Trivandrum.

The carnivorous water beetles (Dytiscidæ) are represented by Cybister confusus (limbatus?) common in tanks

and rice fields as also by *Hydaticus vittatus* and *H. festivus*, the latter an yellow or orange coloured insect with shiny black or dark brown markings. These beetles are wonderfully adapted to an aquatic life, though they breathe air like all other beetles. The larvæ are predaceous like the adults and suck the blood of the prey through their long hollow mandibles. The whirligig beetles (Gyrinidæ) may be found on the surface of still water in tanks or on running water in streams. Numbers of them continually describing complicated movements together is an interesting sight.

A species of Hydrophilus of the family Hydrophilidæ, bearing a general resemblance to a Dytiscid, but with a large prominent spine projecting from the sternum behind the last pair of legs, is found in tanks in Trivandrum. Histeridae are small insects of very compact form, usually shiny black or shiny dark blue with short legs and antennæ and truncate elytra. They live in concealment under stones. in dung, in carcases, etc., and prey on other insects. Several species of Hister are found in Travancore. The Coccinellidae (Lady Bird beetles) are readily recognised by their usual rounded form and their conspicuous colouring. With the exception of Epilachnides which are herbivorous, all are predaceous, feeding on scale insects and plant-lice. Chilomenes sexmaculata is a common species feeding on Aphis. Epilachna, is herbivorous and two species E. dodecastigma and E. 28 bunctata are common on Solanaceous plants causing appreciable damage when abundant. Bostrychidae are small wood boring beetles destructive to cut timber or dry wood and bamboos. Bostrychus aequalis bores into dry wood and Sinoxylon conigerum in cut and dead wood. Dinoderus bilifrons bores in bamboos, both green and dry, and in wood. The small brown beetle, Lasioderma testaceum of the family Ptinidae, is most destructive to cheroots into which the larvæ bore holes. The luminous beetles (Fire flies), Diaphanes and Luciola, are Lampyrid beetles of the family Malacodermidae. Enormous numbers of these may be seen in trees at night during certain seasons. Both sexes are luminous, the light being produced by a whitish patch in the posterior region of the abdomen.

To the Bubrestidae belong the golden beetles, the most brilliantly decorated of all Coleoptera. Sternotera dasypleura, a reddish brown insect having the thorax deeply pitted and coloured metallic-green, is fairly common on the hills, as also Chrysochroa ocellata. Belionota scutellaris is uniform metallic golden-green with some violet on the posterior margin and on the sides of the thorax. The larva bores into the wood of Acacia catechu. The curious Elateridæ popularly known as 'Skip-Jacks' or 'Click beetles', from their habit of springing into the air with a click after falling on their backs, are represented by the common large Agrypnus fuscipes. Alaus speciosus, a white insect with a curious black irregular line down the centre of the thorax and some black spots, is fairly common in the hills.

The great family of *Tenebrionidae* (black ground beetles) is represented by several species belonging to the genera *Opatrum*, *Mesomorpha*, etc. *Cantharidae* are the blister beetles, so called because when they are handled they produce a highly irritant effect on the skin. This is due to the acrid oil excreted from the openings in the joints of the legs, containing the active principle cantharidine. A species of *Mylabris*, black with red markings on the elytra, is common on grass. *Cantharis violacea*, a small deep blueform, has also been recorded.

Chrysomelidae (Leaf-eating beetles) are represented by numerous genera and species. Corynodes peregrinum, a deep blue beetle, is very abundant on wild plants in the plains. Aulacophora foveicollis, A. excavata and A. atripennis are also very common. Hispa armigera is sometimes a serious pest of paddy. Several species of Tortoise beetles (Cassidinæ) have also been noted. Coptocycla and Metriona have been observed on sweet potato in gardens.

The family Cerambycidae (Longicorn beetles) can be recognised by their long antennæ and elongate body. Batocera rubra is a large handsome beetle whose legless grub may be seen in the decaying bark of trees. Clytus annularis is a slender yellowish white beetle with reddish brown markings. Acanthophorus serraticorins, a large beetle about two inches long with brownish elytra, is common in Trivandrum, coming to light at night. Its larva bores in mango. Olenecamptus bilobus Monohammus nivosus and Cælosterna scabrata are other common forms.

The Curculionidac are the weevils. They are recognisable by the head being produced into a beak or rostrum. The palm weevil, Rhynchophorus ferrugineus, is a large reddish brown weevil whose white fleshy legless grubs tunnel through the tissues of the palm and when mature pupate within a cocoon of twisted fibres. This is one of the major pests of the coconut palm in South India, though it has not proved to be very serious in Travancore. Cryptorhynchus mangifera is the mango weevil breeding in the stone of the mango. Calandra oryzae is the minute rice weevil, a pest of stored rice.

Order Lepidoptera. (Butterflies and Moths). These insects are readily distinguished from all other orders of insects by the flattened scales that cover the wings and give rise to the characteristic colour patterns. The mouth parts are in the form of a tubular proboscis which when not in use is kept coiled like a watch-spring below the head. The order is divided into two groups, *Rhopalocera* (Butterflies) and *Heterocera* (Moths).

Butterflies are sufficiently familiar insects and can be easily recognised by any one. Almost all butterflies have a similar life history which is also well known. They are the prettiest of insects and over 250 species are known from Travancore.

The Nymphalids are usually large and brightly coloured and are mostly sunshine loving. Several members of this

group by means of their warning colouration notify birds and other insectivorous animals of their distastefulness. There are others which are edible but escape being eaten by deliberately mimicking their distasteful cousins. Nymphalids are divided into six sub-families.

Sub-Family Danainae. Danais is the most common genus represented by several species in Travancore of which Danais chrysippus is perhaps the commonest. The larva is usually found on Calotropis. "The Chrysalis is light green or pink with golden spots on the anterior (lower) end and a golden black bordered line round the posterior (upper) end." Euploea is another common genus with three species in Travancore of which Euploea core is the commonest. The butterfly is dark brown, the outer margin paler with a double series of white spots. The larva and the beautiful golden pupa are found on Olænder. Hestia malbarica (the Malabar Tree Nymph) is to be met on the hills in the dense forest. Whoever has seen a number of these floating aimlessly about in a forest grove like animated pieces of spotted tissue paper is not likely to forget the scene.

Sub-Family Satyrinae are all soberly clad with the underside in most cases cryptically coloured. They are shade loving insects and are found usually under trees. Parantirrhoea marshalli (the Travancore Evening Brown), a dark brown butterfly with a pale violet band on the fore-wing, has been recorded elsewhere only from Coorg. It is commonly seen in Eetta jungle (Beesha travancorica) on the Pirmēde hills. Melanites ismene is a large, deep brown butterfly with two large black spots near the apex of the fore-wing containing each a white spot and ferruginous marking. The caterpillar is a minor pest of paddy in certain parts of India. This and a few other butterflies in this subfamily exhibit seasonal dimorphism, the wet and dry season forms differing in colouration. Mycalesis, Orsotrtoena, Lethe, Zipatis, Ypthima and Elymnias are the other genera represented.

Sub-Family Morphinae. Amathusia phidippus and Discophora lepida, two large beautiful butterflies, are found in the moist hill forests.

Sub-Family Nymphalinae are sunshine loving butterflies, usually settling with the wing widely spread open. They are mostly brightly coloured and have a strong flight. Charaxes fabius is "a large butterfly with a series of yellow spots forming a band across both wings, with a series of smaller yellow spots near the margin and with the hind-wing produced into two slender tails". Among the other common genera, Euthalia, whose beautiful grass-green larva is armed with ten pairs of long, horizontal, delicately branched spines, is represented by three species. Neptis has four species, Rahinda one, Cyrestes (map butterflies) one. Junonia six and Hypolimnas two. The leaf-butterflies of the genus Kallima of which there are two species, K. inachus and K. horefieldi, are found in forests though they are far from common. The underside of the wings in these is so exactly like a leaf with the veins and mid-rib marked that it is most difficult to discover the insects when they alight. which they do suddenly. Cynthia saloma and Parthenos virens are among the largest of Nymphaline butterflies.

The Sub-family Acraeinae is represented by the little tawny Telchinia violae, very common both in the low country and on the hills.

The Erycinids (*Erycinidae*) are represented by two forms, *Abisara echerius prunosa*, common on the hills at the sides of roads in jungles, and *Libythea myrrha* common on the High Range.

The Pieridae are known as "the whites". White, yellow and orange are the predominant colours. Leptosia mina mina (xiphia) is a small white butterfly common everywhere in the low country. The wings are rounded, the apex of the forewing and a large sub apical blotch black. Delias eucharis is a beautiful common Pierid, white above, the apex of the forewing and hind wing bright yellow below. Ixias burene

is yellow with black and orange covering the apical half of the wing. The two large yellow butterflies of the genus *Catopsila* (C. pyranthe and C. crocale) are very common, their caterpillars feeding on species of cassia. *Terias hecabe*, a little yellow butterfly with black edges to the wings, occurs abundantly in the hills and the low country. Its caterpillars also feed on species of cassia.

The Papilionidae are known as "the swallowtails" and include the largest and the most striking of the butter-flies. The great Troides helena minos, nine inches in expanse, is a beautiful black butterfly with yellow on the hind-wings, fairly common in the low country and on the hills. Other common forms are Papilio demoleus whose cryptically coloured larva feeds on various species of Citrus and on Murraya kænigi, P. Polymnestor, Tros (Papilio) hector, Tros (Papilio) aristolochia, Zetides (Papilio) agammemnon and Z. sarpedon. The last two are very quick fliers and difficult to catch.

Papilio helenus and P. paris tamilana are seen on the hills. Pathysa antiphates naira is a very rare butterfly.

The Lycoenidae are known as "the Blues" and include the Blues, Coppers and Hairstreaks. They are usually small butterflies,* "the hind-wings often with little tails, the colouring usually blue or grey above with metallic reflections grey or white below with many dark spots and, often, coloured ocelli". The larva in most cases is flattened and woodlouse-like and in many there is a sweet secretion from an opening at the hind end that is sought after by ants. Lampides elpis, a light metallic-blue insect, is perhaps the commonest.

Cheritra jaffra and Bindahara phocides moorei (sugriva) common on the hills have very long tails. Virachola isocrates has glossy violet-blue wings. The larva bores into pomegranate, guava, etc., and is sometimes a serious pest. Several other genera are also represented, e. g., Spalgis whose larva

[·] Lefroy.

feeds on mealy bugs, Nacaduba, Lyconopsis (Cyaniris), Catachrysops, etc.

The Hesperidae are "the skippers". They are easily recognised by their moth-like appearance and quick jerky flight. Gangara thyrsis is the largest skipper in Travancore and is common in the low country. The caterpillar is covered with white waxy filaments forming a fluffy secretion all over it. It lives inside rolled-up palm leaves in which it pupates. Parnara mathias is a small olive-brown species with whitish speckles on each side of the wings. The caterpillar is sometimes a minor pest of paddy.

Heterocera (moths). Only a few examples of the more important of the families can be cited in this account.

Syntomidae are warningly coloured moths of semidiurnal habit. The wasp-like Syntomis cyssea with two orange bands on the abdomen is common in the plains. Euchromia polymena is a highly coloured moth with broad orange spots on the wings and two or three crimson bands on the abdomen.

Arctiidae. The caterpillars of these moths are usually hairy with either tufts of long hair or a dense uniform clothing. Pericallia (arctia) ricini is a striking moth, the fore-wing brown with numerous light-ringed dark spots and the hind-wing scarlet with irregular wavy black bands. The hairy larva is a pest of Castor and Cucurbitaceous plants. Nyctemera lactinia having brown fore-wings with a white band and white hind-wings with a brown border is a very common moth both in the hills and plains. Uthesia pulchella having white fore-wings with black and scarlet spots and whitish hind-wings with an irregular black submarginal band is common everywhere.

The Noctuidae form a large group of moths of sombre and often deceptive colouring. They usually spend the day sitting motionless on plants and fly about at night. The larvae of many of these are destructive to crops. Nystipao macrops, a dark coloured moth about five inches in

expanse and with large eye-like markings on the fore-wings often comes to houses at night. Hylodes caranea is another striking moth brown with a light band across the ends of the wings. Ophideres fullonica has red-brown fore-wings with a greenish tinge, orange hind-wing with a large black lunule and a marginal black broad band. This moth is said to have the power of piercing orange fruit with its proboscis and sucking the juice. It is destructive to orange cultivation on that account. Polytela gloriosoe is blue-black with orange specks, whose caterpillars feed on the leaves of Amaryllids in gardens. A few species of Ophiusa whose larvae are semiloopers with the first or first two pairs of prolegs rudimentary are common.

Belonging to the small family *Uraniidae* are *Micronia* aculeata and *Strophidia fasciata*, both common on the hills, the former occasionally seen in the plains also.

Lymantridae are stoutly built dull-coloured moths. The antennae of the male are pectinate, and the female has usually a large anal tuft. The moths do not feed, as there is no proboscis. The caterpillars have distinct erect tufts of hair on the body. Species of Loelia and Lymantria are found. Euproctis fraterna and E. scintillans are also common, their hairy caterpillars seen on various plants.

Hypsidae are a small family of moderate-sized bright coloured moths. The caterpillars also are brightly coloured and sparsely clothed with long hairs. The family contains only a few species of which Hypsa alciphron is very common. The larva is sometimes found in abundance on Pipal and other species of Ficus and defoliates the trees. The moth has buff fore-wings with one white spot on each and yellow hind-wings with round black spots. Argina cribraria having whitish fore-wing with numerous yellow-ringed black spots and bright orange hind-wing with a few large black spots is sometimes abundant at Trivandrum.

Sphingidae are the Hawk moths. These are easily recognised by the torpedo-shaped body, elongated narrow

pointed fore-wings and swift flight. The best known is Acherontia styx, the Death's head moth, so called from the skull mark on the thorax. When handled the moth produces a fairly loud squeak. The large stout light-green caterpillar with a recurved horn on the tailend and oblique dark green stirpes along the sides is found on Dolichos lablab. Campsogene (Calymnia) ponopus is a large purple and brown moth. Deilephila (Daphnis) nerii is a beautiful dark olive-green and pink-hawk moth whose larva feeds on Macroglossa gyrans, one of the "humming bird hawk moths", is found flying by day seeking flowers. It has a very long proboscis and the tip of the abdomen is furnished with a tuft of dense long erectile hairs. In Cephonodes hylas, the common 'humming bird hawk moth', the wings are clear and transparent. In the genera Hippotion and Thereta (Choerocampa) the caterpillar can retract the head and thoracic segments into the swollen metathorax which often has large lateral eye marks. This makes the caterpillar look like a small hooded snake. A few species of these two genera are common in Travancore.

The Geometridae are a family of moths of slender build with a narrow elongated body and large wings. The caterpillars are 'loopers' with only two pairs of prolegs. Their mode of progression consists in moving the fore and hind segments alternately, the centre of the body being raised in a loop. The moths rest with the wings fully opened and tightly pressed against the surface they are on. Eumetia rosalia, a beautiful yellow moth with crimson specks and a crimson band across both wings is common about the low country. Macaria fasciata is another common species, slaty grey with a white band across both wings and two orange blotches on the hind-wings. Naxa textilis is a pretty white moth.

The family Saturniidae includes the wild silk moths. They are of large size and of bright colouring. In some species there are clear transparent circular spaces in the

fore-wings. The moths are short-lived as they do not feed due to the absence of a proboscis. Attacus atlas is the largest Indian moth and is twelve inches in expanse. It is found in the forests of Travancore and occasionally in the plains. Attacus ricini is the domesticated Castor silk moth. It thrives best in a warm damp climate and attempts to rear this in Travancore have met with some success.

Actias selene, known as the 'moon moth', is a large greenish-white moth, the hind-wing produced into a long tail and with a buff and red spot in each wing. It is found both in the hills and plains. 'The tough oval cocoon of silk is usually enclosed in a leaf or leaves. Antheroea paphia, the tassar silk moth, is found in jungles in the low country. The tassar silk worm is not a domesticated insect and the dense cocoon of the wild worm has to be collected from trees in the jungles. Cricula trifenestrata is fairly common in the plains. The caterpillar is seen to completely defoliate certain trees like cashew and mango and make flimsy cocoon of bright golden silk amongst leaves and twigs in masses.

The Psychidae are interesting from the fact that the larvae live in tough cases composed of grass sticks, bits of leaves or other vegetable matter and lined inside with silk. The females are wingless and remain permanently in the case. The male larva, when full grown, pupates in the case and emerges as a winged moth. The caterpillar moves by protruding the thorax and dragging itself slowly along with its habitation. Clania variegata which is fairly common forms its case of small bits of stick. A species of Psyche has been found feeding on the leaves of various plants in gardens.

The family Cossidae are important for the fact that their caterpillars bore into trees and often cause considerable damage. Cossus cadamba is a brown moth, about an inch and a half in expanse, whose larva has been found to bore into teak in Travancore and cause damage.

Lasiocampidae are mostly moderate-sized, thick bodied, cryptically coloured moths. The caterpillars are hairy with tufts directed downwards, long tufts projecting in front and short tufts laterally. Suana concolor is a somewhat sphinx-like moth having dark red brown wings with a lighter margin and one or two yellowish spots. The full grown larva is about three inches long.

Metanstria hyrtaea is fairly common, its stout greyish caterpillar occasionally occurring in large numbers on certain trees.

Limocodidae—The moths of this family have a rounded fore-wing and a somewhat short and rounded hind-wing. The larvae are slug-like, the head, legs and sucker feet being retractile. They are of three types—in one, the body is segmented above and bears spinous processes; in the second, the segmented body is without spinous processes, and in the third, segmentation is absent and the body is covered with a thick smooth skin. When full grown the larva pupates in a very hard round cocoon. Thosea cana is a dull brown moth whose larva is destructive to tea bushes. Belippa laleana is a beautiful red-brown moth, whose slug-like larva in which the outlines of the segments are lost is usually seen on plantain leaf. Parasa lepida is another common form.

Zygaenidae are moths resembling butterflies in their general appearance. Cyclosia australinda looking like a Peirid butterfly is not uncommon about Trivandrum. Histia nilgira found on the hills is very like one of the swallow tails. Heterusie virescens and Chalcosia affinis are common on the hills.

Pyralidae are a large family of moderate to small sized moths of slender build with long thin legs. The caterpillars of some genera are serious pests to crops. Galleria mellonella is destructive to Bee hives, the larvae tunnelling through the wax on which they feed and lining the tunnels with silk. The larva of Schoenobius bibunctifer bores

in the stems of paddy and is sometimes a serious pest. The larva of Euzophera perticella is the Brinjal stem borer. Nymphula depunctalis is a small white moth speckled with black and buff. The larva, known as the rice case worm, is semi-aquatic and lives in cases of rolled pieces of the leaf of paddy. It is one of the major pests of this crop. Glyphodes is a very large genus. The larvæ are all leaf rollers and are usually light green in colour. The larva of G. vertumnalis rolls the leaves of Tabernæmontana coronaria. Sylepta derogata whose pale green caterpillar lives in folded leaves of Hibiscus esculentus is very common.

The *Tineidae* are also a large family of small moths with narrow wings having a broad fringe of scales. Several are destructive to crops. *Nephantis' serinopa* is a serious pest of the coconut palm, the black-headed caterpillar stripping the leaves. "The caterpillar constructs a gallery of silk and excrementitious matter over the lower surface of the palm leaves eating away the green matter and reducing the leaf to a thin membrane so that it dries up and dies".

Tinea pachypsila is a tiny moth whose larvæ feed on flannel, fur, etc.

Order Rhynchota (Hemiptera). This order includes the Bugs and is well represented in Travancore. They are readily recognisable by the possession of a long straight proboscis, adapted for piercing and sucking, kept in a groove under the body when not in use. The order is usually divided into two sub-orders, Heteroptera and Homoptera. In the former, the front pair of wings are thickened and horny at the base, thin and membranous towards their extremities. In the latter the front wings are of the same texture throughout. Many of the bugs live by piercing the tissues of plants and sucking their juices, others by sucking the juices of animals.

The Pentatomidae or shield-bugs are well-represented and many of them are brilliantly coloured. Scutellara nobilis is metallic-bluish green with blackish spots. It is com-

mon on wild plants in the low country. Chrysocoris stockerus is very similar to Scutellara and is seen on Jatropha curcas and other plants. Catacanthus incarnatus is another brilliantly coloured bug, bright red or orange, the margins of the abdomen projecting at the sides and banded in yellow and black. Nezara viridula, a green bug emitting a strong evil scent, is common on low crops. (The majority of the Heteroptera emit the characteristic 'buggy' odour. odour is due to the volatile oily secretion of certain special glands.) The little Coptosoma cribrarea occurs sometimes in enormous numbers on Dolichos lablab and other plants. Aspongopus janus is a red and black bug commonly seen on Cucurbitaceous plants like pumpkin. Canhecona furcellata with a spine on each side of the pronotum is a beneficial bug as it is markedly predaceous and sucks out caterpillars and other insects.

The Corediae are represented by several species the most important of which from the agriculturists' standpoint is the rice bug Leptocorisa varicornis which sometimes occurs in huge numbers on rice plants. The bug sits on the ripening grains and sucks away the milk so that no grain is matured and the ears turn white. Anoplocnemis phasiana is a large brown species with dilated legs found on shrubs in hilly localities.

Among the Lygaeidae, Lygaeus pandurus (= militarie), a red and black bug, is very common on Calotropis. This bug is often confused with Dysdereus cingulatus, the red cotton bug, which it closely resembles.

The Pyrrhoccoridae are represented by the red cotton bug Dysdercus cingulatus, a post to cotton elsewhere. Antilochus coqueberti, a bright scarlet bug with black membrane, is common in the low country.

The Tingidae are the Lace-wing bugs. They are perhaps the most beautiful of the small-sized bugs. Monanthia globulifera is found on the under surface of the leaves of the Tulsi Plant (Ocimum sanctum) and Urentius echinus.

on the leaves of brinjal. The latter is sometimes a serious pest, the leaves being sucked to such an extent that they dry up and fall off.

The Reduviidae are mostly predaceous and can be recognised by the strong curved proboscis which is characteristic of the group. A familiar example is Conorhinus rubrofasciatus common in the plains and found at light. It is known to attack man and suck blood. The young probably prey upon the smaller forms of insect life. This bug has been suspected of acting as a carrier of 'Kalazzar'.

The notorious bed bug Clinocoris hemipterus (=cimexrotundatus) is the sole representative of the family Clinocoridae (=cimicidae). The habits of the bed bug are well
known. Besides being an annoyance it has been known to
be the transmitter of Kala-azar. It is not unlikely that it
disseminates other diseases also.

Helopeltis theirora, one of the Capsidae, is destructive to tea and is known as the mosquito blight. The tender shoots are attacked by the nymphs and adults and considerable damage is sometimes caused. Vigorous hand picking and catching adults in hand nets are the only measures possible to keep the pest in check.

Aquatic bugs, several forms of which are found in Travancore, have interesting habits and adaptive modifications. Pond skaters are common in rivers, tanks and even wells. They run actively on the surface of the water with their greatly elongated second and third pairs of legs and prey upon insects that may happen to fall into the water. Among the forms recorded may be mentioned Gerris raja from Varkala, Jucundus custodiendus from Madathura, Onychotrechus kumari and Janias elegantulus. Allied to the pond skaters is Halobatis, the only insect known capable of living on the surface of the ocean, sometimes several hundreds of miles from land. A species of Halobatis is common on the sea on this coast and its tiny elongated yellowish eggs have been

found on cuttle bone washed ashore. Nepidae are the "Water Scorpions". They can be recognised by the long breathing tube at the end of the abdomen resembling the tail of the scorpion and the raptorial first pair of legs resembling the pedipalps of the scorpion. Water Scorpions are common in fresh-water ponds and the submerged rice fields. Laccotrephes (Neba) maculatus and Laccotrephes ruber are found in Travancore. Ranatra has a long and narrow body and is represented by two species, commonly found among vegetation in tanks. The Naucoridae are represented by two species, Heliocoris vicinus and Naucoris sordidus, and Belostomidae by the largest bug known Belostoma indica, a large flat brown insect about three inches long with predaceous fore-legs and swimming hind-legs. The latter is common in tanks and in submerged rice fields and is attracted to light. A species of Sphaerodema is common in tanks in Trivandrum. The female of this bug lays the eggs on the backs of the male which carries them about till they are hatched. The "Back Swimmers" (Notonectidae) are represented by Anisops varius and Enitheres triangularis and the water Crickets (Corixidae) by two species of Micronecta.

Of the sub-order Homoptera, Cicadas are most in evidence. One does not meet with them in the low country, but from the foot of the hills to the summits their voices are to be heard at times in a chorus which is almost deafening. The males alone sing, possibly as the Greek Poet Xenarchus has stated, in their happiness at having voiceless wives! Several species occur in Travancore such as Purana tigrina, Gaeana atkinsoni, &c.

Fulgoridæ are moth-like bugs usually brightly coloured. The head is often prolonged upwards and forwards with a lantern-like structure. The species common on the hills is Fulgora delesserti. It is a pretty insect with yellow spots on its brown fore-wings and a dark brown apical one on its hind-limbs which are blue. Flatta acutipennis and Flatta tunicata have the fore-wings green and the hind white.

The curious locking Membracidae (Buffalow hoppers) are represented by species of Leptocentrus and Centrotypis. Cercopidae (Frog hoppers) Jasstdae, Aphidae and Coccidae (Scale insects) are represented by numerous forms some of which are injurious to crops. Lac is the resinous excretion of a scale insect Tachardia lacca which has recently been introduced into Travancore.

The order Diptera includes flies, gnats Order Diptera. and mosquitoes. With the exception of mosquitoes, the order has not had much attention paid to it. Psychodidae are very small hairy moth-like flies often seen in shady damp places. Some species are vigorous blood suckers and are likely to serve as carriers of disease. Phlebotomus minutus, one of the commonest species of "sand fly", occurs in Travancore. The bite of this tiny blood sucker is peculiarly irritating. Chironomidae (Gnats and midges) are often confused with mosquitoes to which they bear a superficial resemblance, but they can be easily distinguished from the latter by their short proboscis and the absence of scales. Their worm-like larvae are aquatic and are found in stagnant tanks and pools. They are sometimes red and are called 'blood worms'. A few species occur in Travancore but have not been identified.

Culicidae (mosquitoes) have received considerable attention of late and sixty four species have been recorded from Travancore; Anopheles, Culex, Mansonioides and Stegomyia being the chief genera. Of the numerous species of Anopheles those that transmit malarial infection are Anopheles culicifacies, A. fluviatilis, A. varuna, A. splendidus, and A. jeyporiensis var. candidiensis. Filariasis is caused by two species of Filaria, namely, F. malayi and F. bancrofti. The former shows heavy incidence in the taluks of Shērthala, Ampalapula, Karthikappally and parts of Vaikom as well as in Edapally; and its important transmitting agents are Mansonioides annulifera and M. uniformis. Filaria bancrofties the cause of filariasis in the towns of Trivandrum,

Alleppey, Quilon and Iraniel and its chief transmitter is Culex fatigans.

The Tibulidae are the "Daddy long legs," or crane flies, with very long fragile legs. Several species occur in Travancore, those that are found on the hills being brightly coloured. The Tabanidae known as 'Gad flies' or 'horse flies' are well represented. The females of these are blood-sucking and are a source of annoyance to cattle, horses and men. One species known as the Elephant Fly is most troublesome on the hills at considerable elevations in dry weather. Pangonia which occurs on the hills has a stiff proboscis more than half an inch long. The females are persistent blood-suckers of man and other animals. Robber-flies constituting the family Asilidae are common. The largest is more than an inch having a black body with narrow grey bands. It prevs on other insects but fortunately it does not suck the blood of vertebrates. The flies that one sees commonly hovering over flowers belong to the family Surphidae or 'Hover flies.' Their food is chiefly pollen. The familiar minute, shiny, black-coloured 'eye fly' is one of the Chloropidue. It has the habit of annoyingly hovering round one's eyes and is very fond of clinging to hanging ropes or strings. Several hundreds of them may be seen clinging to a few inches of string. Dacus cucurbitae, the fruit fly that attacks fruits of Cucurbitaceæ, is one of the Trybansidae. The common house fly is Musca nebulo, one of the Muscidae. 'The family Oestridae is of considerable importance as its members are all parasites in the larval stage on warm blooded animals, such as horses, cattle, sheep, etc. Oestrus ovis is a serious pest of sheep. The female fly deposits eggs or living maggots in the nostrils of the sheep and goat. The larvæ work their way upwards into the frontal sinus where they attach themselves. Gastrophilus equi occurs in the stomach of the horse. Hippobascidae are known as the 'cattle flies' or 'dog flies.' Hippobiaca maculata is a post of cattle and H. capeneis is common on dogs.

The Fleas have been grouped under a separate order Siphonaptera. The rat flea, the carrier of Plague bacilli from rats to man, is Xenopsylla cheopis. Ctenocephalus felis occurs on the cat and dog. This is the common flea of dogs here. Sarcepsylla gallinacea is the fowl flea. Among the Aptera, an order comprising rather primitive wingless insects, Ctenolepisma is very common as a household pest occurring amongst papers, books and pictures, frequently doing considerable damage.

The order *Thysanoptera* includes a group of very small insects called thrips, various species of which occur on various plants. Some live in flowers; a few have been found to produce galls in which they live; others live on leaves. Though they are commonly harmless, appreciable damage is sometimes done.

shrimps, Clam shrimps, Water fleas, Barnacles, Wood lice,
Prawns, Lobsters, Crabs, etc. They are
mostly inhabitants of the sea where they
are present everywhere from the shore pools down to the

The Crustaceans form a large group comprising Brine

mostly inhabitants of the sea where they are present everywhere from the shore pools down to the depth of the ocean. A number of Crustacea live in freshwater and a few on land. They present a great diversity of shape and habit and are of all sizes from the minute water fleas to the giant lobsters. The Crustaceans are divided into two sub-classes, the *Entomostraca* and the *Malacostraca*.

The Entomostraca are mostly small forms. They are well represented in Travancore but no systematic survey has been made of them and the forms collected have not all been properly identified. No member of the Anostraca or Notestraca has been obtained so far. Conchostraca (Clam shrimps) are represented by a species of Limnadid, common in fresh-water ponds, with a carapace in the form of a thin bivalve shell. Daphnis and a few other genera of water fless abound in certain ponds. Ostracoda are represented

by the genera Cypris, Herpetocypris and Spirocypris with tuberculated shell; and Copepoda by Cyclops in all freshwater tanks and ponds and by Calanus and several other genera living in the sea where they form an important part of the plankton. The goose barnacle Lepas anserifera is found in small clusters on floating pieces of drift wood, cuttle bones, etc., and Balanus amphitrite, a species of sessile or Acorn barnacle, covers the rocks like a carpet of little sharply pointed pyramids just below high water mark on the rocky coast at Kōvalam, Colachel and Cape Cōmorin.

sub-class Malacostraca includes shrimps, Sandhoppers, Wood lice, Prawns, Lobsters, Crabs. etc., all of which are well represented. The order Schizopoda (opossum shrimps) is represented by a species of marine Mysis found in large numbers in the plankton. The order Amphipoda is represented by two or three kinds of Gammarids common among sea weeds on rocky coasts and a species of the 'beach flea' or 'sandhopper' Orchestia found among debris on the beach. No fresh-water amphipod has been noted in this region. The order Isoboda has free living as well as parasitic representatives. A species of Sphaeroma (Exo-sphaeroma?) occurs among weeds on rocks and among the sand tubes of the polychæte Sabellaria. Clinging to the sea weeds by the curved and pointed thoracic logs is a species of dark-coloured, elongate, Isopod of the family Idoteidae. Among parasitic forms the commonest is a species of Cymothoa found on the skin in the gill chambers and in the mouth of several kinds of marine fishes. Bopyrid Isopods, parasitic in the gill chambers of marine prawns, have also been obtained. The semi-terrestrial Ligia exotica have been collected from 'Vallams' (country boats) where they live in concealment under matting. Among land Isopods or wood lice may be mentioned the two commonest forms recently identified: (1) Nesodilla jonesii found under stones and flower pots, under the bark of decaying wood and

in similar moist situations and (2) Nagara travancorica, a slightly elongate and more slender form. The former rolls itself into a ball when touched.

The order Decapoda is divided into 3 sub-orders the Macrura, the Anomura, and the Brachyura.

The Macrura include the Prawns and Lobsters. These possess a well developed abdomen usually held in the extended condition. A species of Penaeus is common in backwater. A species of Palaemon grows to nine inches in length and is commonly sold in the market. the backwaters a very large prawn P. carcinus is found. Palinurus dasypus is perhaps the commonest lobster; it reaches a length of over a foot. The cephalothorax is olive green with dull reddish-yellow markings; the abdominal rings are finely spotted with orange. It has long antennæ. The cephalothorax is thickly covered with spiny tubercles and there is a large spine over each eye. Panulirus fasciatus is another lobster found among rocks and has longer antennæ. It is bluish-green with orange, transverse lines a little above the posterior margins of the somites. Thenus orientalis is a reddish-brown lobster found on rocky shores. Its head appendages are curiously produced into leaf-like processes.

The sub-order Anomura, the members of which are distinguishable by the more or less reduced abdomen usually carried bent under thorax, is represented by a species of the porcelain crab Porcellana, two mole crabs Hippa asiatica and a species of Albunea, and one or two species of Pagurus (Hermit crabs). Porcellana is a littoral crab in which the last pair of legs are reduced and folded up in the gill chamber. Mole crabs are so called from their habit of burrowing in sand for which their feet are curiously modified. Enormous numbers of Hippa asiatica may be dug up from the shore, but Albunea is much less abundant. In the latter the antennæ are very long and opposed to one another keeping open a tubular passage down which water is sucked

in for respiration. The Hermit crabs use the empty shells of Gastropod molluses to protect themselves and their structure is wonderfully modified to fit them for this mode of life.

The sub-order Brachyura comprises the true crabs, in which the abdomen is greatly reduced and is kept permanently tucked up under the thorax in a groove excavated on the thoracic sterna. The crabs are divided into five tribes, representatives of four of which have so far been found. (1) The tribe Oxystomata comprises crabs distinguished by the triangular shape of the mouth frame which is narrowed in front and extends forwards between the eyes. Matuta victor is a swimming crab with a stout outwardly directed spine on each side of the carapace and all the legs flattened into paddles for swimming. Calappa lophos has a strongly convex carapace with the sides broadened behind to cover the legs, and the pincers are enlarged and compressed and closely apposable to the carapace so that when folded they form a covering to the face and give it complete protection. The feet are adapted for walking. These two crabs are fairly common in Kovalam, Puvar, and Cape Comorin. Philyra scabriuscula is a round-bodied crab with slender appendages. It is fairly abundant on the sandy shore at Kovalam and Puvar where it may be seen quickly burying itself into the wet sand freshly disturbed by a retreating wave.

(2) The tribe Cyclometopa characterised by a rather circular capapace, a square mouth and the greatly flattened third maxillipeds forming a sort of lid over the other cral appendages, is represented chiefly by the following forms.

Fam: Portunidae—Swimming crabs.

Scylla serrata, a dull greenish-blue large crab; Charybdis annulata, resembling the former but smaller in size; C. crucifer, purplish-red with creamy white markings suffused with lighter purple, one of them forming a more or less conspicuous cross; Neptunus sanguinolentus and N. pelagicus. All these are swimming crabs with the anterior legs normal but the end joints of the last pair of legs flattened into broad paddles.

Fam: Xanthidae.

The body is usually transversely oval and the legs are not adapted for swimming. They are mostly littoral. *Eriphia laevimana*, *Ozius tuberculata* and *Menippa rumphii* have been collected from Nindakara.

Fam: *Thelphusidae*—River crabs. *Thelphusa leschenaulti* is abundant in rice fields.

- (3) The tribe Catometopa. Most of the members of this tribe may be easily recognised by the more or less square outline of the flattened carapace. Ocypoda platytarsis and O. cordinana are the gregarious swift-footed crabs with very long eye stalks, commonly seen running swiftly on the sands. These have become exclusively land animals, their gills having disappeared and the gill chamber modified into air breathing lungs. On the shores of backwater are seen swarms of the curious Calling crab Gelasimus annulipes. The female is ordinary looking but the male has one of the claws (pincers) enormously developed and brightly coloured. He flourishes this claw with much ceremony before a prospective bride for exciting her admiration and also uses it as a weapon in sexual combats with other males. Four species of the square carapaced Grapsus are found on our coast as also species of a few related genera, for example, Plagusia squamosa, Varuna litterata, Sesarma quadratum, metograpsus messor, etc.
- (4) The tribe Oxyrhyncha including the spider crabs and related genera is represented by Schizophrys aspera occurring in Vēļi lake.

The order Stomatopoda comprises the mantis shrimps so called from the resemblance of their great raptorial 46

claws to those of the Orthopteran insect, the praying mantis; most of them live in burrows in sand, while others live in crevices of coral or rocks. The order is represented by Squilla nepa and two other species.

Myriapoda. The class Myriapoda includes the millipedes and the centipedes. The former are distinguished by their usually cylindrical body with two pairs of legs to each segment and by the absence of poison claws. pedes are sluggish creatures and live mainly on vegetable substances. Their 'stink glands' secrete a fluid of a most unpleasant order. This gives them some protection against enemies. Numerous species are found in Travancore but systematic collection has been made. Of the Pillmillipedes or Oniscomorpha, Arthrosphaera inermis is fairly common in the low country and A. lutescena has been collected from the hills. There are several species of the worm-like millipedes or Helminthomorpha. The small black millipede with flattened segments and a yellow line on each side, very common at Trivandrum and elsewhere, has been recently determined by Sylvestri and named Jonespeltis splendidus. Spirostreptus malabaricus is the long black millipede, about a foot in length, found abundantly both in the hills and on the plains. Trackyulus modestor each segment of which carries from 11 to 18 warty spines is fairly common on the hills.

The centipedes are active creatures living for the most part in dark places under stones, logs of wood, etc. They are predaceous on insects and worms which they bite with their poison claws and kill by the secretion of the poison gland. The two centipedes that are frequently found about houses are Scolopendra morsitans and Rhysida longipes. The Geophilidae are long worm-like centipedes with short legs and body segments numbering over one hundred. They are mostly subterranean in habits. Mecistocephalus punctiferus is the commonest species. Orphnaeus brevilabiatus is the phosphorescent form commonly found crawling up

walls leaving a bright trail of light behind it. The phosphorescence is caused by the fluid secreted by the sternal glands. Scutigera longicornis is a peculiar centipede about an inch and a half long with about fifteen pairs of very long slender legs. It is fairly common about Trivandrum and in the hills at low elevations.

This class includes the Scorpions, Spiders, Mites, &c. Of the former six species have been identified in Travancore

Arachnida. of which one Chiromachetes fergusoni is peculiar to it. The great black scorpions of the genus Palamnaeus are to be found under stones.

P. scaber is about four inches long and has the hands and vesicle tinged with red. Lychas tricarninatus, a brownish yellow scorpion about two inches long, is often found in houses especially about the bath-rooms.

The Whip-scorpions or Pedipalpi resemble the true scorpions but may be recognised by the fact that the abdomen is sharply marked off from the cephalothorax by a constriction. They are divided into a tailed group Urobugi and a tailless Amblipygi. The former have a movable tail corresponding to the sting of the scorpions. They live in damp places under stones or in crevices of wood or rock. There are two species of Upopygi identified, Thelyphonus indicus and Thelyphonus sepiaris subspecies muricola, about an inch and a half long and with a tail rather more than an inch. It is black above with red legs. There are some smaller species which have not yet been identified. Of the Amblibygi the only species yet found is Phrynichus phipsoni: the body is much flattened and kidney-shaped, the abdomen oval. The body is about an inch and a quarter long and black. All the legs are long especially the first pair which are like antennae. Except for the long prehensible chela, it is outwardly like a spider. The true spiders or Araneae are well represented. Of the larger species some twenty have been identified but there are many more as yet

unnamed. Of the named ones six have not been found elsewhere, but this is probably due to the fact that very little attention has been paid to this order. The six species peculiar to Travancore are Sason armatoris and Sasonichus sullivani. Ground-living burrowing spiders. Poecilotheria rufilata, a large hairy red spider obscurely mottled, total length of body two inches, legs about three, which lives in trees; there is another species P. striata, grey with dark stripes not quite so large. They hunt by night and feed on beetles, cockroaches, &c. Psechrus alticeps, about three quarters of an inch long with slender legs about two inches, which spins a large web, is found in the hills and in the plains. It is yellowish-brown variegated with black. Fecenia travancorica, an allied species, has been found at Madathura. Pandercetes celatus, a hunting spider, coloured grey and mottled with brown so as to match the lichencovered bark of trees, is the last of the spiders peculiar to Travancore. Of the others those most frequently met with are Nephila maculata and Nephila malabarensis. The former is about an inch and a quarter long with long strong legs. It has the thorax black, the abdomen olive brown with yellow lines and spots. The latter is less than an inch long, the thorax is black with yellow hairs on it, the abdomen greyish-brown mottled darker. They spin webs composed of radiating and concentric threads. That of Nebhila maculata is often found across bridle paths in forest on the hills, and the threads are very elastic and strong and appear to be covered with some glutinous substance as they stick if one comes in contact with the web. Some spiders of the genus Gasterocantha are curiously shaped. G. geminata has the abdomen twice as broad as long, with paired spines sticking out on each side and behind; it is yellow with two transverse black stripes. Of the hunting spiders, Peucetia viridana is common on the hills. It is about half an inch long, more or less green all over, and lives amongst grass and other plants where it seeks its prey. In houses Heteropoda

venatoria is very common. It is a greyish brown spider about three quarters of an inch or more long with legs about twice this length and moves sideways running very quickly. The Acari or Mites, a species of velvety mite of the genus Trombidium about half an inch long, looking as if it were covered with plush, is found at Udayagiri, but probably the commonest is the microscopic itch-mite, Sarcoptes scabiei, which tunnels under the skin of man where it lays eggs which hatch and the young then start burrowing also. Ticks of the genus Ixodes are very common on cattle and in fact they attack all land vertebrates including snakes and lizards. They are common in grass lands.

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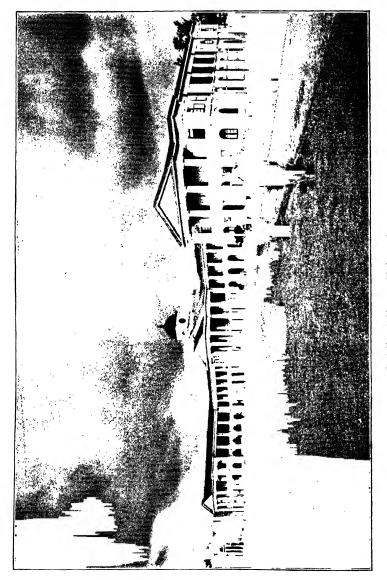
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CHAPTER VI.

THE PEOPLE.

The people of Travancore form a more or less homogeneous community with common aims and aspirations, united together by a deep General. abiding loyalty to His Highness the Mahāraja and the Ruling House. They are better educated than their brethren in the other Indian States and Provinces. There are no linguistic or racial cleavages which retard the consciousness of common citizenship. From the Nampūtiri who occupies the apex of the edifice of caste, claiming pure uninterrupted descent from the Aryan immigrants, down to the Parayas and Pulayas who are regarded as representing the ancient inhabitants, is a gradation of classes with welldefined physical characteristics, social customs and distinctive recollections. But for centuries and centuries they have been living together in an atmosphere of mutual good feeling under a steady policy of religious toleration pursued by a line of illustrious sovereigns whose influence has borne rich fruit in arresting the centrifugal and strengthening the centripetal forces. For a long time some of the backward classes among the Hindus smarted under the feeling of social disabilities imposed by the rules of caste and custom. Certain castes within the Hindu fold sought conversions to Christianity and Islam in order to raise their status. But these disabilities have been removed by the great Temple Entry Proclamation promulgated by the present Maharaja. At present the appreciation of sectional interests converges to a feeling of brotherhood based on reciprocity of feeling and service.

In this respect Travancore differs from the other important Indian States. In Hyderabad the vast bulk of the population is Hindu, but the dominant community is

Muhammadan, although the latter form only a fifteenth of the total population. The Hindus fall into three main classes, Telugu, Marathi and Canarese, while the Muhammadan community presents a mixture of Afghans, Persians, Arabs, Abyssinians, Turks and Moghuls. In the Maratta States of Central India, the bulk of the population is Rajput in descent, the Marattas numbering only 30,000 or 3 in a thousand. "In almost every Rajput State an oligarchy rules over subject races". In Kashmir eighty per cent. of the population is Muhammadan, while the ruler is a Hindu. But in Travancore the people form a cohesive whole notwithstanding differences in religion. No linguistic barriers separate the people. The important languages are Malayalam Tamil, the former spoken by 4,260,860 persons and the latter by 788,455. Ninety nine per cent. of the people speak either the one or the other of these two languages. But the languages are so akin that there is no difficulty for the exchange of ideas between Malayalis and Tamilians.

Sectarian organisations have for some years endeavoured to stimulate and strengthen caste and class consciousness by emphasising the social and political rights of groups organised into separate social units. But the enlightened policy of His Highness's Government is advancing the legitimate aspirations of corporate national life by removing social evils by legislation and granting equal opportunities to all in bettering their prospects and in serving the State. This condition is the result of a gradual evolution of a peaceful character.

Travancore like South India appears to have been an inhabited country from the earliest times of pre-historic antiquity. But the study of ethnology and anthropology have not hitherto been pursued to the extent which the importance of the subjects demands or the facilities permit. Recently His Excellency Lord Linlithgowobserved:— "The monuments of antiquity, eloquent witnesses to the historic and cultural achievements of this great country, constitute

a heritage of incalculable value and significance, which it must be our privilege to guard and to hand over to posterity". This statement of policy is sure to exert a beneficial influence in the study of primitive man. The Travancore Government is making arrangements for a careful investigation into the subject. Until a proper pre-historic survey is conducted, no authoritative opinion can be predicated regarding the people who inhabited this land in very ancient times.

It is believed, however, that the Kuravās, Pulayās and various classes of hill tribes owe their descent to the aboriginal tribes who are supposed to have fallen from their high estate and got submerged under waves of immigration. Representatives of the Pre-Dravidian and Āryan races are still to be seen in different parts of the State notwithstanding the modifications which time has effected in their environments and their physical characteristics. The Nāyars, the Nānjanād Veļļāļās, the Nampūtiris, the Malabar Kshatriyās, the Ampalavāsis and several families of Syrian Christians trace their occupation to very early times. The Īļavās and Shāṇārs are believed to have migrated from Ceylon also in the remote past. So are the Mukkuvans. The Muhammadans came to Travancore in the eighth and ninth centuries.

The population of the State is composed mainly of Hindus, Christians, and Muhammadans. Besides these, there are a few minor sections which follow Jainism, Zoroastrianism, Animism, Buddhism, Sikhism, and Judaism. But the Hindus form a predominant proportion making up a total of 3,137,795 out of an aggregate of 5,095,973. The Christians and the Muhammadans come next in respective order. The Hindu population is nearly double that of the Christians who in turn form four and a half times the number of the Muhammadans. The Muhammadans like the Christians are mostly

converts from among the Hindus and their descendants. The proportion of the people following other religions to the total population is very small, their total number amounting only to 3,336. There is very little racial difference between the major communities as now constituted. But there are marked differences in their mode of living, social customs and food.

The following table gives the area and population of the State as compared with certain other Indian States, British Provinces and foreign countries.

| Country | | Area in sq. miles. | Population |
|-----------------------|-----|-----------------------|------------|
| Jammu & Kāshmir | | 84,516 | 3,646,243 |
| Hyderabād | ••• | 82,698 | 14,436,148 |
| Mysōre | | 29,326 | 6,557,302 |
| Gwāļior | ••• | 26,367 | 3,523,070 |
| Bikānir | | 23,317 | 936,218 |
| Barōda | | 8,164 | 2,443,007 |
| Patiala | ••• | 5,932 | 1,625,520 |
| Cochin | | 1,480 | 1,205,016 |
| Travancore | ••• | 7,625 | 5,095,973 |
| Madras Presidency | ••• | 142,277 | 46,740,107 |
| Bombay including Aden | | 123,679 | 21,930,601 |
| Sweden | ••• | 173,157 | 6,141,671 |
| Ceylon | ••• | 25,332 | 5,442,000 |
| England & Wales | | 58,340 | 39,947,931 |
| Java & Madura | | 50,557 | 42,264,000 |
| Norway | | 124,964 | 2,890,000 |
| Scotland | ••• | 30,405 | 4,842,554 |
| Irish Free State | ••• | 26,592 | 2,972,802 |

The population of the State is distributed among 3,971 villages and 46 towns. The number of inhabited houses is personal personal

Barōda which is next among the states in order of density is not even half so populous as Travancore, while Hyderabād and Mysōre have only a density of 175 and 223 respectively. The neighbouring Province of Madras also is not half so densely peopled as Travancore. Among the foreign countries Java and Madura tops the list closely followed by England and Wales, and Travancore takes the fourth place. Denmark and the Irish Free State have only a density of 207 and 112 respectively. Travancore is thus one of the most thickly populated regions in the whole world, the only part of India having a higher density being the neighbouring State of Cochin.

The Southern division represents the densest area and the Central, the Northern and the High Range divisions rank in respective order. The densities of the four administrative divisions, according to the census of 1931, are 963, 717, 700 and 94 respectively. Of the natural divisions the Lowlands come first in population with a mean density of 1,743 persons per square mile. The Midland division has only about a half and the Highland division a little less than one-twentieth of that density. In the Southern division it has increased by 24·1 per cent. during the last decade, in the Central by 25·1 per cent. in the Northern by 29·9 per cent. and in the High Range by 84·3 per cent. The corresponding increases in the Lowland, Midland and Highland divisions are 24·2, 27·4 and 54·7 per cent. respectively. The increase in density in the High Range division has been very much higher than in any

other administrative division in successive decades. This is due to the steady extension of cultivation.

The following table exhibits the ratio of the area and population of each division, natural and administrative, to the total area and population of the State.

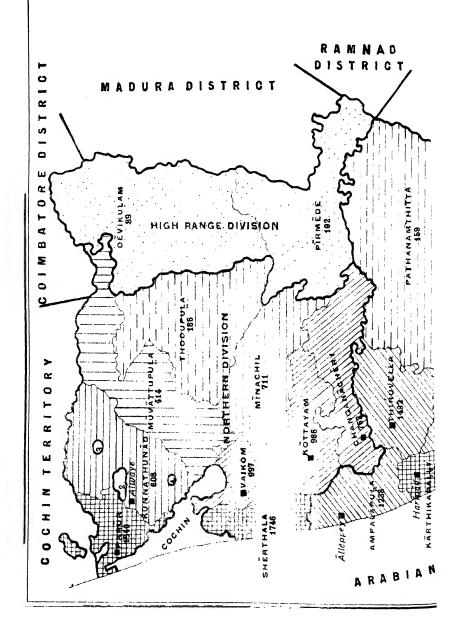
| Division. | Area in sq. miles. | Population. | Percentage of total population. |
|--------------------------|--------------------|-------------|---------------------------------|
| State. Natural. | 7,625 | 5,095,973 | |
| Lowland | 1,371 | 2,389,549 | 46.9 |
| Midland | 2,707 | 2,415,494 | 47.4 |
| Highland | 3,547 | 290,930 | 5.7 |
| Administrative. | | | |
| Southern | 1,490 | 1,433,956 | 28.1 |
| $\operatorname{Central}$ | 2,595 | 1,861,472 | 36.5 |
| Northern | 2,422 | 1,695,321 | 33.3 |
| High Range | 1,118 | 105,224 | 2.1 |

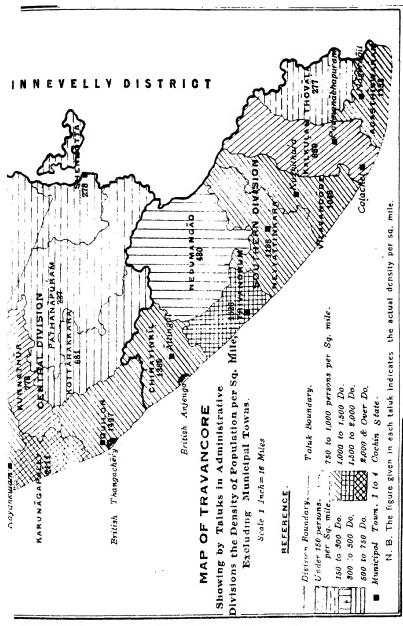
The density in the divisions rises very much higher when calculated on the area available for cultivation and still higher when calculated on the area actually cultivated. The following table shows how widely the natural divisions differ in this respect.

| Natural division | area in | area in | | | Density on cultivable area. | Density on cultivated area. |
|---------------------|---------|---------|-------|-------|-----------------------------------|-----------------------------------|
| Lowland | 2,707 | 1,198 | 1,093 | 1,743 | 1,994 | 2,186 |
| Midland | | 2,329 | 1,854 | 892 | 1,087 | 1,303 |
| Highland | | 1,227 | 492 | 82 | 237 | 591 |

The variation of density in taluks is even more marked than that of the divisions.

The following table shows the relative density of the taluks.





Copied from Census Report 1931.

Litho, The Art Printing Works, Trivandrum.

| Name of taluk | Density of population per sq. mile | Name of taluk | Density of population per sq. mile |
|----------------|------------------------------------|----------------|--|
| Trivandrum | 2,336 | Kalkulam | 900 |
| Karunagappally | 2,161 | Changanāśśery | 840 |
| Kartikappally | 1,925 | Kunnathūr | 778 |
| Shērthala | 1,746 | Minachil | 711 |
| Quilon | 1,680 | Kottārakkara | 681 |
| Parūr | 1,625 | Kunnathunād | 625 |
| Māvēlikara | 1,562 | Nedumangād | 430 |
| Thiruvalla | 1,533 | Mūvāttupula | 414 |
| Ampalapula | 1,497 | Shenkōtta | 371 |
| Agasthīśwaram | 1,487 | Thōvāla | 277 |
| Chirayinkil | 1,317 | Pathanāpuram | 237 |
| Neyyāttinkara | 1,177 | Thodupula | 186 |
| Kõttayam | 1,083 | Pathanamthitta | 159 |
| Vaikom | 1,067 | Pīrmēde | 102 |
| Vilavancōde | 1,067 | Dēvikulam | 89 |

It will be seen from the above table that nine out of thirty taluks have a density ranging from 80 to 500, thirteen from 600 to 1,500 and eight from 1,500 to 2,000 or more. The density shown in the table is inclusive of municipal When the towns are not excluded, Trivandrum with its population of 2,336 persons per square mile is the most densely populated taluk. But when the towns are excluded, Karunāgapally, having a density of 2,161, leads off with Kārthikappally, Sherthala and Parur following and Trivandrum with its density of 1,526 going down to the fifth place. At the other end of the scale stand Devikulam and Pirmede which contain no municipal town, with a density of 89 and 102 respectively. The accompanying map shows that the taluks along the sea-coast have much higher density than those which are inland. The inequalities become more marked in the taluks when they are arranged by natural divisions.

The distribution of population in the natural divisions is slightly different from that in the administrative divisions. 25.1 per cent. of the total area containing 62.1 per cent. of the population of the State has a density of 1,050 and

over. The area is situated mostly in the Lowland division and to a small extent in the Midland division also. The portions having a density of 900—1,050, 750—900 and 600—750 form 2·0, 13·1 and 13·3 per cent. of the total area with 2·9, 15·6 and 13·7 per cent. of the population respectively, and lie entirely in the Midland division. As much as 46·5 per cent. of the area which contains only 5·7 per cent. of the population has a density below 300 and this is situated wholly in the Highland division. This irregularity is due to the peculiarities of climatic and other conditions obtaining in them. The taluks or portions of taluks lying in the Highland division have the lowest density.

The factors that govern the density of population in Travancore are chiefly those concerned with the cultivation of crops and the distribution of the produce. Rainfall, soil, means of communication and the kinds of crops cultivated are the most important of these factors. It is not possible to isolate any one of them from the rest and study its influence on density independently of the others. All of them operate jointly and it is their combined effect which influences the distribution of population.

The following statement will show that the population Variation in of the State has been rapidly increasing. population.

| Year of | Population | Percentage of increase of population | | |
|--|--|--------------------------------------|---|--|
| census | I op diliterali | Recorded | Deduced | |
| 1816 1836 1854 1875 1881 1891 1901 1911 1921 | 906,587 1,280,668 1,262,647 2,311,379 2,401,158 2,557,738 2,952,159 3,428,975 4,006,062 5,095,973 | | to Ward and r's Survey) 10.0 11.8 16.2 19.1 24.8 | |

During 59 years (1816—1875) the population of the State had increased two and a half times. It increased by 3.9 per cent. between 1875 and 1881 and has again more than doubled itself during the next fifty years. Each decennial census since 1881 disclosed a steady increase, the percentage of variation being the highest for the decade 1921—1931, viz., 27.2.

The decennial increase has been greater in Travancore than in India as a whole and in most Provinces and States as may be seen from the following table.

| Country, Province or State | | Increase in population per cent. | | |
|-----------------------------|-----|----------------------------------|-----------|--|
| Journey, 110 times of Suite | | 1911—1921 | 1921—1931 | |
| India. | ••• | 1.2 | 10.6 | |
| Madras. | | 2.2 | 10.4 | |
| Bombay. | ••• | 1.8 | 13.4 | |
| Bengal. | | 2.7 | $7\cdot3$ | |
| Hyderabad. | | 6.8 | 15.8 | |
| Mysōre. | | 3.0 | 9.7 | |
| Barōda. | | 4.6 | 14.9 | |
| Cochin. | | 6.6 | 23.1 | |
| Travancore, | | | | |
| (enumerated) | | 16.8 | 27.2 | |
| (deduced) | ••• | 19.1 | 24.8 | |

The physical and economic conditions of Travancore are more favourable to the growth of population than those obtaining in other parts of India. Excepting in portions of a few large towns there is no overcrowding of houses in this State. Even in towns houses are often scattered and most of them have gardens attached. "The cleanliness of the people of Malabar is proverbial. Even the poorest have a daily bath and keep themselves, their houses and premises as clean as possible." Living under such conditions, it is not surprising that there are no serious or widespread outbreaks of epidemics. Life is simple. The soil is fertile and nature bountiful. Rain is generally plentiful, and though there

may be some shortage or irregular distribution at times, it never keeps off entirely. The country gets the benefit of both the monsoons and cultivation seldom meets with total failure. The economic condition of the average Travancorean is, therefore, better than that of the average Indian. Such conditions naturally favour a high birth-rate and a low death-rate. The birth-rate in Travancore is over 41 per mille, while the death-rate is only 20 per mille. In India generally the birth-rate is not higher, but the death-rate goes up to 35 or even more per mille.

The fertility of the people of this State is high and is in fact much higher than that of the inhabitants of other parts of India. Child-marriage which reduces fertility to a considerable degree is very rare in Travancore. The average number of children born to ten families in Travancore is sixty five as against fifty seven in Barōda. The highest average of seventy children per ten families is seen among the Christians. Not only are the number of children born to each family greater than in Barōda, the survival rate also is higher in Travancore than in that state, forty nine children surviving in every ten families here as against thirty four there. These facts explain how, while the population in Barōda increased only by 14.9 per cent. during the last decade, that of Travancore increased in the same period by 24.8 per cent.

The following figures show that the movement of Movement of population in the various divisions, natural Population. and administrative, during the last five decades has varied inversely.

| Natural divisions. | | 1881— 1891 | 1891 1901 | 1901— 1911 | 1911— 1921 | 1921— 1931 |
|---|-----|--------------------|----------------------|----------------------|----------------------|----------------------|
| Lowland division Midland ,, Highland ,, | ••• | 5·2 7·5 13·2 | 14·3 15·9 24·4 | 13·2 18·2 30·2 | 15·0 17·4 32·2 | 24·2 27·5 54·8 |

| Administrative d | ivisions. | 1881— 1891 | 1891 1901 | 1901— 1911 | 1911 1921 | 1921— 1931 |
|-------------------|-----------|---------------|--------------|---------------|--------------|---------------|
| Southern division | ··· | 3·1 | 15·7 | 17·5 | 17·0 | 24·0 |
| Central ,, | | 9·7 | 12·8 | 15·2 | 17·0 | 25·2 |
| Northern ,, | | 5·0 | 17·6 | 14·5 | 15·5 | 29·9 |
| High Range ,, | | 136·2 | 46·8 | 85·7 | 42·0 | 84·9 |

In all the divisions the rate of increase in 1921—1931 is higher than those in the previous decades and varies inversely as the density. The rate of increase in the Northern division is somewhat higher and that in the High Range is very much higher than the average rate in the whole State. Such wide variations must be due to the influence of migration and to a small extent also to the difference in the rates of births and deaths in the different divisions. The main cause, however, is migration, both internal and external.

The rates of increase in all natural divisions are higher in the last decade than in the one previous to it. In the Lowland division the rate for the past decade is almost the same as the deduced rates of increase for the State and in the Midland division it is higher. In the Highland division the rate of growth of the population during the decade is considerably higher than the average rate for the State and is due to immigration. It is here that the greatest development of cultivation has taken place during the decade. It may be noted that out of a total number of 128.369 immigrants in this division as many as 79,433 have come from outside the State.

The growth of population varies inversely as the density of the cultivated area also, except in the case of a few taluks, especially if the taluks are divided into broad groups according to their density as shown in the ollowing table. following table.

| Group | Taluk | Density of population per sq. mile of culti- vated area in 1931. | Percentage of increase in population between 1921 and 1931. |
|-------|----------------|--|---|
| I. | Trivandrum. | 2,842 | 29.5 |
| | Quilon | 2,663 | 26.1 |
| | Karunagappally | 2,550 | 21.7 |
| | Shērthala | 2,287 | 26.6 |
| | Karthikappally | 2,278 | 21.2 |
| | Kunnathunad | 2,044 | 22.6 |
| | Ampalapula | 2,039 | 28.7 |
| | Average. | 2,359 | 25.4 |
| II. | Parūr | 1,883 | 19.3 |
| | Thiruvalla | 1,852 | 23.3 |
| | Chirayinkil | 1,831 | 22.8 |
| | Neyyattinkara | 1,767 | 26.2 |
| | Kunnathür | 1,752 | 25.3 |
| | Kalkulam | 1,712 | 19.9 |
| | Mävēlikara | 1,668 | 20.2 |
| | Vilavancode | 1,647 | 19.8 |
| | Kottayam | 1,481 | 33.3 |
| | Vaikom | 1,378 | 28.4 |
| | Changanā śśēry | 1,337 | 41.4 |
| | Average. | 1,653 | 25.4 |
| III. | Agasthiśwaram | 1,875 | 15.0 |
| | Thōvāla | 1,294 | 10.0 |
| | Shenkotta | 1,105 | 7.2 |
| | Average. | 1,552 | 12.6 |
| IV. | Nedumang&d | 1,191 | 40.2 |
| | Pathanamthitta | 993 | 37.1 |
| | Mūvāttupuļa | 978 | 31.0 |
| | Kottārakara | 917 | 26.5 |
| | Minachil | 907 | 25.8 |
| | Pathanapuram | 896 | 37.3 |
| | Average. | 974 | 32.3 |
| v. | Thodupula | 847 | 58-4 |
| - | Devikulam | 464 | 79.9 |
| | Pirmede | 431 | 91.6 |
| | Average. | 674 | 718 |

The taluks in Group II have lower density than those in Group I and the average rate of increase in the population is the same as that of the latter. Group III is an exception. The three taluks in the group show the least increase in population in spite of their average density of the cultivated area being less than that of the two previous groups. The taluks are more or less like the adjoining British territories. They have a rainfall about the same as that of the Tinnevelly district and the people live in congested villages as in British India unlike as in other parts of Travancore. In these circumstances it is but natural that the rate of growth of population follows the trend in British India and is much less than that in other parts of Travancore.

A note-worthy feature of the rate of growth of population in Travancore is the large increase in the taluks included in the last two groups. The inverse ratio between the density of the cultivated area and the rate of increase is seen very clearly in these groups. The increase in the population of the taluks in these groups is due to the extension of cultivation and the consequent influx of immigrants from other parts of the State as well as from outside. Agriculture is the main occupation of the people of these taluks and the facilities which they afford for cultivation have attracted large numbers of immigrants from elsewhere in Travancore and from outside the State.

The number of occupied houses returned at the last occupied houses.

Consus is 929,930 as compared with 761,827 at the census of 1921. The percentage of increase in houses during the last four decades are 12.4, 14.2, 14.9 and 22.1 respectively.

The increase in the number of occupied houses has been shared by all the divisions in the State and has been more or less proportionate to the increase in the population. Though the rate of increase in houses is the same in the Central and Northern divisions, the rate of growth of population is higher in the latter than in the former.

The total number of families in the State at the time of the census of 1931 was 932,312. This gives an average of 5.46 persons per family, while the average number of persons per house is 5.48. The average number of persons per house has steadily risen from census to census. It was 5.08 in 1901, 5.17 in 1911, 5.26 in 1921 and 5.48 in 1931.

Of the different administrative divisions, it is seen that the Southern division has the highest number of persons per house and the High Range the lowest. The Northern division has a slightly higher average than the Central, though it has a lower density than the latter. the natural divisions the number of persons per house varies directly as the density. The number of houses per square mile has risen during the last decade in all the administrative and natural divisions, corresponding to the increase in the population. In 1931 the number of houses per square mile was 122, which is 22 per cent. higher than the figure in 1921. The Lowland division which is the most densely-populated region has naturally the largest number of houses per square mile and the Highland division with its lowest density has the smallest number. In the former there are eighteen times as many houses per square mile as there are in the latter. But the difference becomes less striking when the number per square mile of cultivable or cultivated area is considered. The houses in the Lowland division are getting so crowded that there is only a little over an acre and a half of cultivated land for each house in that division, while in the Highland division each house gets nearly five and a half acres and in the Midland about two and three fourths acres.

The statistics regarding buildings other than houses are given below:—

| Shops. | 35,639 |
|-------------------------------------|--------|
| Schools and Colleges. | 4,940 |
| Public offices and other buildings. | 2,048 |
| Temples. | 9,250 |
| Churches. | 2,627 |
| Mosques. | 756 |
| Miscellaneous buildings. | 14,439 |
| Total. | 69,699 |

The population of Travancore is distributed between urban and rural areas in the proportions of 10.8 to 89.2 per cent. The urban area is composed of Urban and rural eighteen municipal towns and thirty nonpopulation. municipal towns. About seventy four per cent. of the urban population live in the former and twenty six per cent, in the latter. Trivandrum leads off with a population of 96,916. The next largest town, Alleppey, has less than half the number. The capital of the State holds 17.4 per cent, and the nine industrial and commercial towns 32.7 per cent. of the aggregate urban population. Half the urban population live in these ten towns and the other half in the remaining thirty eight. average population of a town was 11,995 in 1931 as against 10,648 in 1921, showing an increase of 12.6 per The average population of the municipal towns increased from 17,098 in 1921 to 21,498 in 1931, i.e., by 25.7 per cent. and that of the other towns from 4,200 to 5,308 or by 26.4 per cent. The industrial and commercial towns have the largest average population, viz., 20,030, if the capital of the State is left out of account. The next in order are the market towns, then come the old urbanised areas, next the agricultural and distributive towns and last the temple towns. Among the administrative divisions the Southern has ninteen, the Central fifteen, the Northern twelve and the High Range two towns. Among the natural divisions twenty four towns are in the Lowland, nineteen in the Midland and five in the Highland.

The urban population has increased by 375 per cent. since 1881. The variation in the urban population has not followed the order of variation in the aggregate population. During the last decade the increase in the population of towns which existed as such in 1921 was 25.1 per cent. as against the recorded increase of 27.2 per cent. in the total population.

The large majority of the urban population in Travancore live in towns with a population of 10,000 or over and their proportion has been increasing from decade to decade. In 1921 these towns had 67.2 per cent. of the total urban population and in 1931 it has risen to 72.3 per cent.

The total area of the towns is 16148 square miles, with a population of 549,455, which gives a density of 3,403 persons per square mile. Shenkota has only a population of 12,225 but it has the highest density, namely, 17,464 per square mile, i. e., 2,788 houses are huddled together with a population of 12,225 in a small area of 0.7 square mile. Next to it come in order, Alleppey, Nagercoil and Trivandrum. The most sparsely populated towns are Neyyattinkara and Attingal.

Out of 1,000 persons in towns 648 are Hindus, 239 Christians and 112 Muslims, the proportion of Hindus being highest in the Southern division, that of Christians in the Northern division and Muslims in the Central division. Taking the total population in each of the main religions, it is seen that 19·1 per cent. of the Muslims, 11·3 per cent. of the Hindus and 8·1 per cent. of the Christians reside in towns. This order is maintained not only in the State as a whole but also in the different divisions. The Muslims, unlike the Hindus and Christians, are traders more than agriculturists, and, therefore, live in towns in proportionately larger numbers than the other communities.

The sex ratio is lower in towns than in the rural area, there being 955 females per 1,000 males in the former against 990 in the latter. It may be noted, how-

ever, that the sex ratio has increased both in towns and in villages during the decade 1921—1931 but more slowly in the former than in the latter. When the number of women per 1,000 men has increased by seventeen in the villages, the increase in towns has been eight only.

Towns generally, and those towns in particular which have a large immigrant population, have a smaller proportion of children than the villages. In every 10,000 persons, children under 15 number less in all the towns than in the State as a whole, while the towns have larger proportions of persons aged 15 to 25 and 25 to 55 than in the whole State.

The village in Travancore is different from the ordinary village in the districts on the east coast of the Madras Presidency and in most other parts of India. The latter is invariably a cluster of houses situated in a small and compact area, surrounded by extensive tracts of arable land. On the other hand, Travancore presents a continuous expanse of isolated houses. In the rural parts each family lives within its own ancestral holding which is enclosed by an earthen wall or fence of trees or shrubs. The fields and other open grounds in the neighbourhood, on which crops are grown, delight the eye with their perpetual verdure. Isolated as the homesteads were, a large number of them situated in localities having well-known, though undefined, boundaries, formed themselves into karas or self-contained units of rural organisation from very early times, with due provision for the requirements of social economy. This system flourished in the karas until individualistic ideas began to grow in recent times. The kara organisation has practically ceased to function. 'The kara has an average area of 19 square miles. It is distinct from the pakuthy or revenue village which has an average area of 176 square miles. A pakuthy comprises from three to twenty karas. There are 3,900 karas and 439 pakuthies in all the thirty taluke taken together. The average population of a kara is

1,155 and that of a pakuthy 10,494. The population is growing fast in the villages. According to the census of 1931 there is a rural population of 4,544,185. These villages have 836,734 occupied houses. Some of them, especially in the coastal taluks, are more populous than some of the towns. 209 villages have a density of more than 2,500 persons per square mile, some having more than 3,500. The following figures show the villages classified according to population:—

| Population group. | $No.\ of\ villages.$ |
|-------------------|--------------------------|
| 20,000—50,000 | 1 |
| 10,000—20,000 | 4 |
| 5,00010,000 | 69 |
| 2,000 5,000 | 572 |
| 1,000- 2,000 | 977 |
| 500— 1,000 | 867 |
| Below 500 | 1,446 |
| | Total $\overline{3,936}$ |

Migration may be divided into five classes:—

Migration.

- (i) Casual.
- (ii) Temporary.
- (iii) Periodic.
- (iv) Semi-permanent.
- (v) Permanent.

Casual migration consists in movements of people from a village or town to another or others in the neighbourhood. Temporary migrations are brought about by quest for employment, pilgrimages, etc. Periodic movements take place during harvest time or for taking advantage of seasonal industries. Semi-permanent migrations are caused by change of residence to earn a livelihood. In such cases the people concerned return to their native homes when the employment reasons.

The labourers coming from the adjoining British districts to work in the cardamom estates belong to the periodic type, while emigrants generally from the State, most of the immigrants in the tea and rubber plantations and many of the immigrants to Nedumangād, Pathanāpuram, Pathanamthitta, Changanāśśēry, Thōvāla, Pīrmēde, and Dēvikulam taluks from other parts of India belong to the semi-permanent type. The immigrants to the above taluks, whether from within or without Travancore, who have stayed in the tea, rubber and cardamom plantations for more than five years fall within the class of permanent immigrants.

The volume of external migration is not considerable, while that of internal migration is still less. The total number of immigrants was 135,103 between 1921 and 1931 and the number of Travancoreans residing beyond the limits of the State was 58,466. Of the former 26,964 or 20 per cent. of the total number were born in the adjacent State of Cochin, 82,963 or 61.4 per cent. in the contiguous districts of the province of Madras, 21,379 or 15.8 per cent. in the non-contiguous districts of the same province, 2,546 or 1.9 per cent. in other parts of India, and 1,251 or 0.9 per cent, in countries beyond India. The last class includes 453 from Ceylon and 377 from the United Kingdom. The immigrants are found mostly in towns, in the High Range and in the frontier taluks. The proportion of the sexes is the same among Hindu immigrants. Females preponderate among Christians and males among Muslims. 79,433 or 59 per cent, of the total immigrants are labourers and are found in the tea, rubber and cardamom estates in the High Range.

Of the 58,466 emigrants, 31,167 are in Cochin, 16,604 in the province of Madras, 2,213 in the other provinces and states in India and 8,482 in countries beyond India. Of the last class 4,333 are in the Straits Settlements and Malay States, 3,393 in Ceylon, 62 in Africa, 53 in Borneo, 31 in the

United Kingdom, 28 in Persia, 16 in America and 10 in Mesopotamia. The number of emigrants has increased from census to census but has always been less than that of the immigrants.

Of the total population of the State 61.5 per cent. are Hindus, 31.5 per cent. Christians, 6.9 per cent. Muhammadans and the remaining 0.07 per cent. are people belonging to several minor religions.

| Religion. | | Number. |
|-------------------|-----|----------------|
| Hindu. | | 3,134,83 |
| Arya. | ••• | ; |
| Brahmo. | ••• | . 1 |
| Christian. | ••• | 1,604,47 |
| Muslim. | | 353,27 |
| Tribal religions. | | 2,90 |
| Jew. | | 29 |
| Buddhist. | | (|
| Jain. | | |
| Zoroastrian. | | : |
| Sikh. | | |
| Unspecified. | | |
| - | | Total. 5,095,9 |

It will be seen from the above statement that the Hindu, Christian, Muslim and Tribal religions together claim 9,999 out of every 10,000 of the population. The distribution of population by religion in the natural and administrative divisions of the State are given below:—

| Division. | Population. | Hindus. % | Christians. | Muslims. | Primitive tribes. % |
|-------------|-------------|--------------|-------------|----------|---------------------|
| | | Nat | ural. | | |
| Lowland. | 2,389,549 | 68.1 | 62:3 | 8.3 | 0.0 |
| Midland. | 2,415,494 | 54.6 | 39.6 | 5.6 | 0.0 |
| Highland. | 290,930 | 56.6 | 27.6 | 6.8 | 9.0 |
| - 7 | | Admini | strative. | • | |
| Southern. | 1,433,956 | 67:3 | 24.9 | 7.1 | 0.7 |
| Central. | 1,861,472 | 66.1 | 25.4 | 8.0 | 0.5 |
| Northern. | 1,695,321 | 49.2 | 44.4 | 6.0 | 0.4 |
| High Range. | 105,244 | 72.6 | 21.3 | 2.7 | 3.4 |

Hinduism with its 3,134,837 followers is the predominant religion in the State. Its followers form 61.5 per cent. of the aggregate population. This excludes Hindus. the followers of minor subordinate sects, such as Arya Samājists and Brahmo Samājists. The primitive tribes are gradually giving up their tribal religions and joining the ranks of the Hindu population. The census of 1891 showed that the Hindus in the preceding decennium increased by 7 per cent. But between 1921 and 1931 the Hindus have increased by 23 per cent. Comparatively this increase is not in proper proportion. The aggregate population of the State has increased by 27.2 per cent. during the period. The decrease in percentage in the Hindu population is accounted for by the vigorous and extended activity of the proselytising religions.

During the decade 1921—1931 not less than 100,000 conversions have been made to Christianity from the Hindu fold.

Of the thirty taluks of the State, Shenkōtta has the highest proportion of Hindus, viz., 89 per cent. At the bottom of the scale stands Mīnachil with 37 per cent. and immediately above it are Thodupula and Mūvāttupula each with 39 per cent. Changanāśśēry has 41 per cent. and Kōttayam and Kunnathunād 45 per cent. each. Excepting these taluks the proportion of Hindus in all the other taluks is more than 50 per cent.

The following table shows the variation in the numerical strength of the followers of the three main religions during an aggregate period of 112 years from 1820, the year of Ward and Conner's Report, to 1931, the year of the last census.

| Year | Religion | Population | Percentage |
|---------|-----------|-------------|------------|
| 1816—20 | Hindu | 752,371 | 83·0 |
| | Christian | 112,158 | 12·4 |
| 1931 | Muslim | 42,058 | 4·6 |
| | Hindu | 3,134,837 * | 61·5 |
| | Christian | 1,604,475 | 31·5 |
| | Muslim | 353,274 | 6·9 |
| | | | |

^{*} This figure excludes Brahmos, Arya Samājists and people following Tribal religions,

TABLE SHOWING THE COMPARATIVE GROWTH OF DIFFERENT RELIGIOUS.

| | Total | Hindus Rel | Hindus and Tribal Religions. | CP | Christians. | M | Muslims. |
|---------|------------|-------------------|---------------------------------|-------------------|-----------------------------------|-------------------|-----------------------------------|
| 1 68 I | Population | Actual number. | Percentage of total population | Actual number. | Percentage of total population | Actual number. | Percentage of total population |
| 1816—20 | 906,587 | 752,371 | 83.0 | 112,158 | 12.4 | 42,058 | 4.6 |
| 1875 | 2,311,379 | 1,702,149 | 73.6 | 496,023 | 20.3 | 140,056 | 6.1 |
| 1881 | 2,401,158 | 1,755,610 | 73·1 | 498,542 | 8.02 | 146,909 | 6.1 |
| 1891 | 2,557,736 | 1,871,864 | 73.2 | 526,911 | 9.02 | 158,823 | 2.9 |
| 1901 | 2,952,157 | 2,063,798 | 6.69 | 697,387 | 9.82 | 190,566 | 6.5 |
| 1911 | 3,428,975 | 2,298.390 | 0.29 | 903,868 | 26.4 | 226,617 | 6.1 |
| 1921 | 4,006,062 | 2,562,301 | 0.49 | 1,172,934 | 29.3 | 270,478 | 2.9 |
| 1931 | 5,095,973 | 3,137,795 | 61.6 | 1,604,475 | 31.5 | 353,274 | 6.9 |

The Christian community in the State numbers 1,604,475, including Europeans and Anglo-Indians who number 587 and 790 respectively. It has been steadily increasing at a much larger rate than the Hindus and the Muslims. This is mainly due to conversions and to some extent to the high fertility of the Syrian Christians. The decennial rate of increase among the Christians has been higher than that of the Hindus. It is also higher than the aggregate State population during the past several decades. During the decade 1921—1931 the Christians have increased by 36.8 per cent.

Mīnachil has the highest proportion of Christians. The other taluks which contain more than 50 per cent. Christians are Changanāśsery, Kōttayam, Mūvāttupuļa and Thodupuļa. In Chirayinkīl the Christians are only two per cent., in Shenkōtta four, Karunāgappaļļy and Kārtikappaļļy eleven, and Trivandrum fifteen per cent. The Syrian Christians dwell mostly in the Northern division and in the Thiruvalla, Pathanamthitta and certain other taluks of the Central division. The different sects of Christians and the proportion to the total Christian population is given below:—

| Sect. | Actual number. | Percentage of the tota Christian population. |
|---|---|--|
| Anglican Communion Jacobite Syrian Marthoma (Reformed Syrian) Romo Syrians Roman Catholics Salvationists South India United Church Others including other Syrians | 85,262 337,872 142,486 449,173 360,217 58,991 138,958 31,517 | 5·3 21·0 8·9 28·0 22·4 3·7 8·7 |

The Muslims have increased by 30.6 per cent. during the last decade, the recorded population in 1931 being 353.274. The marriage customs and the Muslims. economic conditions of the Muslims are such as are conducive to a high fertility and their rate of increase is therefore higher than that of the Hindus. Their fertility, however, is not so high as that of the Christians. There is no taluk which possesses more than 16 per cent. Muslims. Chirayinkil has 16 per cent., Karunagappally 15, Kunnathunād 13, and ten other taluks less than 5 per cent. Dēvikulam has the smallest proportion, viz., 1 per cent. It is noteworthy that out of nine taluks whose population is 10 per cent. and more Muslims, six are on the sea-coast and only three, viz., Nedumangad, Pathanapuram Kunnathur, in the interior. There are both the Sunni and Shiah sects of Muslims in Travancore. But the Shiahs are numerically very small, numbering only 1,319.

The Jews form the chief class among the followers of the "Minor" religions. Buddhism has had a few converts from the Īlava caste during the last sixteen years. The Jains and Zoroastrians, though the total number of the two classes put together is only 54, have also shown a small increase. In recent years a few individuals have embraced the Sikh faith.

According to the last census 17 per cent. of the aggregate population are under five years of age, 30 per cent under ten years, 42 per cent. under fifteen years, about 42 per cent. between fifteen and fifty years and a little over 9 per cent. above 50 years. The table below illustrating the distribution of 1,000 of each sex in certain age-groups shows that there has been a large increase in the proportion of children under ten years and of persons above fifty. The proportion of persons aged 10—15 and 15—50 shows a fall,

DISTRIBUTION OF 1,000 OF EACH SEX IN CERTAIN AGE GROUPS.

| | 1921 | | 1931 | |
|-------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Age-groups | Males | Females | Males | Females |
| 0—10 10—15 15—50 50 & over | 278 125 504 93 | 282 125 501 92 | 304 112 488 96 | 309 115 481 95 |
| Total. | 1,000 | 1,000 | 1,000 | 1,000 |

The following figures showing the distribution of 1,000 persons of each religion by certain age-groups prove that there is a larger proportion of children among Christians and Muslims than among Hindus.

DISTRIBUTION OF 1,000 PERSONS OF EACH RELIGION BY CERTAIN AGE GROUPS.

| Age-Group | Hindu | Christian | Muslim |
|---|---|---|--------------------------------|
| 0—10 10—15 15—40 40—50 50 and over. | 298 118 393 148 43 1,000 | 313 126 383 137 47 1,000 | 316 127 392 130 35 |

The Census Commissioner has calculated from the mortality rates and the expectation of life at birth and at quinquennial ages that the average length of life in Travancore is 43.80 years for males and 44.55 years for females.

In Travancore as in most other parts of India the number of males is slightly more than that of females. The

Sex. 1931 census has recorded 2,530,900 females. The sex ratio or the number of females per 1,000 males is 987. This is the highest sex ratio since 1881. The sex ratio is the highest in the Southern division, the figure being 999. In the Central division it is 995, in the Northern division 983 and in the High Range 766. The difference in the sex ratio is most striking in the natural than in the administrative divisions. The sex ratio of the actual population of the State is 987 as against 985 for the natural population. The variations in the sex ratios in the natural population of the natural and administrative divisions are given in the following table.

NUMBER OF FEMALES PER 1,000 MALES IN THE NATURAL POPULATION.

| Natural division. | |
|--------------------------|-----------|
| Lowland | 996 |
| Midland | 980 |
| Highland | 955 |
| Administrative division. | |
| Southern | 998 |
| Central | 990 |
| Northern | 974 |
| High Range | 1,003 |

Unlike in western countries the proportion of females to males is lower in urban than in rural areas chiefly because there are no large industrial cities which attract more women to the urban centres and because the occupations in the towns are more suited to men than to women.

At all the censuses the Hindus have had the highest sex ratio. The sex ratio of the Christians is lower than that of the Hindus but higher than that of the Muslims. The primitive tribes have a higher sex ratio than the marumakkathāyis and the latter a higher ratio than the makkathāyis.

In eleven taluks there is an excess of females over males, though the males are larger in number in the other taluks as is generally the case in other parts of India. In Thövala, Agasthiśwafam, Chirayinkil, Quilon, Kafunagappally, Karthikappally and Mavelikara the excess of females has been more or less a permanent feature of the population. while in the remaining four taluks, namely, Shenkotta, Shērthala, Parūr and Kunnathunād, the number of women has exceeded that of men only at the last census. these taluks are on the sea coast. Comparatively, Travancore has a lower sex ratio than the United Kingdom, the Provinces of Madras and Bihar and the States of Pudukottai and Cochin and a higher one than India as a whole, the Provinces of Bengal, Bombay, the United Provinces and the Punjab and the States of Hyderabad, Mysore, Baroda and Jammu and Kāshmir.

The figures indicating the civil condition* of the Civil condition. total population are given below:—

| , | Persons. | Males. | Females. |
|-----------|-----------|-----------|-----------|
| Unmarried | 2,700,739 | 1,498,635 | 1,202,104 |
| Married | 2,020,683 | 993,386 | 1,027,297 |
| Widowed | 374,551 | 73,052 | 301,499 |

Several causes, such as the preponderance of the Dravidian element in the population not governed by the Sastraic Hindu law of marriage, the greater self-reliance

[&]quot;Civil condition is the term used in the Census Reports to signify marriage relationship.

consequent on the system of inheritance and the regulation of proprietary rights of the women following the marumakkathayam law, who constitute the large majority, the spread of western ideas and the rapid progress of female education in the State during the last several decades, have given Travancore a unique position in India in regard to the rights of women and the conditions of marriage. Taking the population of 15 years and over, this State occupies an intermediate position between India as a whole and the western countries in regard to unmarried females as well as males, the larger proportions of unmarried persons than in India being a common feature of all the previous censuses. This intermediate position holds in regard to the proportion of widows also. The primitive tribes have the smallest proportion of unmarried males and females, while the largest proportion of unmarried males is found among the Muslims and of unmarried females among the Christians. The highest proportion of widows is found among the Hindus and the smallest proportions of widowers and widows among the Muslims and the Christians respectively. The proportion of unmarried men in all the municipal towns together is about 23 per mille more than that in the rural parts, showing thereby that in Travancore, as in western countries, town life discourages marriage among adult men. Child marriage is extremely rare in this State. Comparatively it is more common among the primitive tribes than among the more civilised communities.

289 per mille of both sexes, 866,313 or 408 per mille of males and 351,611 or 168 per mille of females, are literate.*

The Northern division stands first in literacy both among males and females. The Central division comes next. Of the male population more than 50 per cent. are literate in four taluks, 40—50 per cent. in seven, 30—40 per cent. in fifteen, 20—30 per cent. in three Children under five years of age are excluded from the calculation.

and 15 per cent. in one. Similarly, more than 25 per cent. of the females are literate in four taluks, 20—25 per cent. in four, 10—20 per cent. in sixteen and less than 10 per cent. in six. Mīnachil in the Northern division stands first in male literacy and Thiruvalla in the Central division heads the list in female literacy, while Dēvikulam is at the bottom of the scale both as regards male and female literates. Generally, literacy among females as well as among males is greater where the Syrian Christians preponderate and it is least prevalent in places where estate coolies and others like them constitute the bulk of the population. In taluks where the population is predominantly Tamilian, female literacy is considerably lower than in taluks where the Malayālis form the majority of the population.

As regards literacy by sex, the number of female literates per 100 male literates by religion as well as by certain age groups is shown below:—

| $Age \ group.$ | | Religion. | | |
|----------------|----|----------------|----|--|
| All ages. | 41 | All religions. | 41 | |
| 510 | 66 | Hindu. | 35 | |
| 10—15 | 62 | Christian. | 53 | |
| 15—20 | 54 | Muslim. | 11 | |
| 20 & over | 32 | | | |

For census purposes castes and communities are classified as 'Advanced', 'Intermediate' and 'Illiterate' according as they contain more than 50 per cent. 10—50 per cent. or less than 10 per cent. literates in the male population of seven years and over. Deducting 71,534 persons belonging to minor castes, for whom literacy figures have not been compiled, from the total population of Hindus including Tribal Religions, and dividing the remaining population of 3,066,261 on the basis of the classification mentioned above, 33.7 per cent. of the total including Brahmans (Malayāļi as well as non-Malayāļi), Malayāļi Kshatriyās, Ampalayāsis, Kaņiyāns, Nāyars and

Vellalas fall in the first category, 52.6 per cent. in the second and 13.7 per cent. in the third. The last category includes all the primitive tribes and the Parayans, Pallans, Pulayans and Kuravans, while all the other castes fall in the Intermediate class. Of the Christians 59.9 per cent. come under 'Advanced' and the remaining 40.1 per cent. under 'Intermediate'. The whole Muslim population is in the 'Intermediate' class.

Among Hindu females Malayāli Kshatriyās are 'Advanced', Brahmans, Nāyars and Vellālās 'Intermediate' and the remaining communities 'Illiterate'. 96.23 per cent. of the Christian females are 'Intermediate' and 3.7 per cent. 'Illiterate', the European and Anglo-Indian females who constitute not more than '07 per cent. of the entire Christian female population alone coming in the 'Advanced' group. Muslim females and those of the primitive tribes and most of the backward communities are in the 'Illiterate' group.

As regards literacy in the vernaculars, 92 per cent. of the total literate persons are literate in Malayāļam and 8 per cent. in Tamil, the corresponding proportions among male literates being 91.3 per cent. and 8.7 per cent. Among female literates the figures are 93.6 per cent. and 6.4 per cent. respectively.

The total number of persons aged five and over who are literate in English is 80,651 composed of 65,500 males

Literacy in English.

and 15,151 females. One in every thirty-two males and one in every 142 females has acquired literacy in English. The highest proportions of literates in English, male and female, are found among Syrian Christians, particularly of the Mar Thoma Sect. In education Travancore is ahead of all the British Indian Provinces and States except Cochin.

Twenty nine languages are spoken in the State.

These together with the number of persons speaking them are given below:—

| | Family, Sub-family &c. | | No. of languages returned. | No. of speakers. |
|----|---|-----|----------------------------|------------------|
| | STATE | ••• | 29 | 5,095,973 |
| 1. | Vernaculars of India | | 14 | 5,091,006 |
| | Dravidian Family | | 5 | 5,064 323 |
| | Dravidian Group | | 4 | 5,054,468 |
| | Andhra Group | | 1 | 9,855 |
| | Indo—European Family Indo—Aryan Branch | | 9 | 26,683 |
| 2. | Vernaculars of other Asiatic countries | | 6 | 3,596 |
| 3. | European Languages | | 9 | 1,371 |

Malayalam is the mother-tongue of 84 per cent. of the population and Tamil of 15 per cent. There are only 185 persons who speak Tamil for every 1,000 persons speaking Malayalam. These two languages, which are the vernaculars of the State, are together spoken by 99 per cent. of the entire population, the remaining one per cent. only speaking all the other languages taken together. Malayalam-speaking population has increased by 27.2 per cent. during the decade 1921-1931, the Tamil-speaking population by 26.2 per cent. and those speaking the other languages by 48.7 per cent. 80 per cent. of the people speaking Malavalam are found in the Central and Northern divisions and about 74 per cent. of those speaking Tamil in the Southern division. Those who speak the other 27 languages constitute only a little below one per cent, of the total population in the Southern, Central and Northern divisions, but over 5 per cent. in the High Range. The hill tribes of Travancore have no separate language of their own but speak a crude language, the words used being of Malay Llam or Tamil origin.

As regards bi-lingualism in respect of Malayalam and Tamil, it is interesting to find that where Malayalam is the preponderating mother-tongue the proportion of Malayalis who can speak Tamil is very small and that, on the other hand, the Tamilians who are in the minority acquire the habit of speaking Malayalam in larger proportions. The reverse is the case where the preponderating mother-tongue is Tamil. When a community is in a minority in any locality, it tries to adapt itself to the surroundings by learning to speak the language of the majority community, the necessity to learn varying with the proportion of the former to the latter. If the Malayalis and Tamilians living in localities where Tamil or Malavalam is the preponderating mother-tongue are considered separately, it is seen that 158,363 Tamilians live in the midst of 4,166,350 Malayalis and that 94,510 Malayalis live in the midst of 630,092 Tami-It is this variation in the proportions of the two communities that mainly accounts for the difference in the proportion of the members of one community learning to speak the language of the other. The sub-joined table shows the number of persons per 10,000 who can speak one of these languages as mother-tongue with Malayalam or Tamil as a subsidiary language.

| Mother-tongue. | No. per 10,000 speaking as subsidiary language. | | |
|----------------|---|-------|--|
| | Malayalam | Tamil | |
| Telugu. | 1,845 | 5,657 | |
| Tulu. | 5,006 | 989 | |
| Kanarese. | 3,970 | 3,189 | |
| Konkani. | 6,883 | 118 | |
| Marāthi. | 7,754 | 254 | |
| Western Hindi. | 4,387 | 2,063 | |

Tulu, Konkapi, Marathi and Western Hindi are combined more largely with Malayalam than with Tamil, Telugu with

Tamil more than with Malayalam, and Kanarese more or less equally with either.

Statistics collected in respect of the five infirmities mentioned in the table below show that the total number of afflicted persons has increased more than two and a half times during thirty years.

| I 6: | No. afflicted. | |
|----------------|----------------|-------|
| Infirmity. | 1931. | 1901. |
| Insanity. | 2,068 | 503 |
| Deaf-mutism. | 2,883 | 809 |
| Blindness. | 3,191 | 1,043 |
| Leprosy. | 2,789 | 1,414 |
| Elephantiasis. | 14,709 | 5,924 |
| Total | 25,640 | 9,693 |

The largest number and the highest ratio of afflicted persons are found in the Northern division and the smallest number and the lowest ratio in the High Range. Of the other two divisions the Central contains a larger number and a higher ratio than the Southern. About 918 per cent. of the persons afflicted with elephantiasis are found in the Lowland, that being essentially a disease of the coastal tracts.

Males are more subject to the attack of these infirmities than females, the sex-ratios among those afflicted being 797 for the insane, 638 for deaf-mutes, 763 for the blind, 369 for lepers and 746 for persons afflicted with elephantiasis. The infirmities prevail more among grown up persons than among younger ones, 56.5 per cent. of the total number of afflicted persons being found in the age-period 20—50, 30.1

per cent. in the age-period 50 and over and only 134 per cent. in the ages up to 20 years. The extent of these infirmities is slightly less in municipal towns than in the other parts of the State.

The Census Report states that there are nearly 500 castes among the Hindus. Of these 77 only were found numerous enough to require separate treatment. It is curious that all the other 423 castes taken together number only 3,381. This means that 423 out of the 500 castes comprise very few individuals. Some families retain the caste-name as a distinctive mark.

Castes with a population of not less than 20,000 each are shown below in the order of their numerical strength.

| | Caste | Strength | |
|-----|--|-----------------------|--|
| 1. | Īlava. | 869,863 | |
| 2. | Nāyar (including Chakkāla & Mārān). | 868,411 | |
| 3. | Nādār. | 2 3 3,982 | |
| 4. | Kammāļa. | 208,441 | |
| 5. | Pulayan (including Thantapulayan). | 208,132 | |
| 6. | Kuravan. | 87,071 | |
| 7. | Parayan (Sāmbavar). | 4 7 0,68 4 | |
| 8. | Vellālan. | 69,627 | |
| 9. | Brahmans (Malayāļi & others). | 68,072 | |
| 10. | Thantān (Ūrāli). | 41,214 | |
| 11. | Velakkithalanayar (including | | |
| | Ampattan). | 30,908 | |
| 12. | Pallan. | 29,880 | |
| 13. | Veluthādanāyar (ıncluding Vaṇṇān, Pathiyan and Maṇṇān). | 28,311 | |
| 14. | Arayan (including Marakkan, | 1 25 450 | |
| | Mukkavan and Nulayan). | 27,456 | |
| 15. | Vāņiyan (Vaņigavysian). | 23,527 | |
| 16. | Valan. | 21,172 | |

Most of the sub-castes returned at the earlier censuses have disappeared, as the fusion of sub-castes has become the common endeavour of all caste associations. Organised attempts are also being made for the fusion of allied castes and for the substitution of new caste names for the old.

The primitive tribes including Kāṇikkāran, Kuravan, Malankudi (Vishavan), Malapantāram, Malapulayan, Malaūiāļi, Malayarayan, Mantān, Muthuvan, Nāyādi, Paļiyan, Thantapulayan, Uļļātan, Vē an and Vē tuvan have a total population of 128,838, of whom 115,151 are Hindus, 10,780 are Christians and 2,907 belong to the Tribal Religions.

Of the total population 1,447,388 or 29 per cent. are earners, 929,906 or 18.2 per cent. working dependants, and 2,688,679 or 52.8 per cent. non-working dependants, the first two together constituting the working population. 39 per cent. of the workers are engaged in agriculture, tending cattle, hunting and fishing, about 15 per cent. in industries, nearly 2 per cent. in transport services, about 7 per cent. in trade, a little over 3 per cent. in public administration and professions and about 30 per cent. in domestic service. The following figures illustrate the distribution of the working population by religion in some of the sub-classes:—

| Occumation | No. per 10,000 of | | |
|--|--|--|--|
| Occupation | Hindu | Christian | Muslim |
| Exploitation of animals and vegetation. Industry. ,, Transport. ,, Public administration. Trade. ,, Professions and liberal arts. Domestic service. Unspecified. | 1,891 882 66 43 244 117 1,332 256 | 1,901 346 83 19 301 106 1,509 182 | 1,217 537 108 10 884 87 1,590 230 |



Canoes carrying Cocoanut and Copra, Alleppey.

A little above 54 per cent. of the average population, workers and non-workers taken together, is supported by agriculture. 39,000 persons are engaged in fishing, more than 8,000 in cashew-nut industry, over 106,000 in coir-yarn industry, and over 18,000 (including 17,000 women) in rice-husking. Of the total industrial population 93 per cent. are engaged in cottage industries, the remaining 7 per cent. only being factory workers. The educationally advanced castes, such as Brahmans, Malayāli Kshatriyās, Ampalavāsis and Kaniyāns, have taken to new occupations in larger numbers than the backward and illiterate classes. So do the Nāyars and Vellālās, though the bulk of them follow agriculture which is their traditional occupation.

Out of the entire female population of the State 360,603 are earners, 768,167 working dependants and the remaining 1,402,130 non-working dependants. The proportion of female workers has increased substantially in agriculture and allied industries, but there is a distinct drop in the proportion of female to male workers in transport, trade and unspecified and unproductive occupations. domestic service agriculture employs the largest number of women, industries coming next. The making of lace, crepe. embroidery, etc., and rice husking are essentially woman's occupations, the other chief occupations in which more women than men are engaged being the making of gur. molasses, sweetmeats and condiments. The women of the lower classes earn their livelihood by doing such work as scavenging, washing and cleaning. Generally workers in small industries carried on at home receive more help from women than from men; agriculturists receive the least assistance from women, traders more and industrialists most.

Judged from the proportion of non-working depen-Unemployment. dants to the total population, there is more unemployment in Travancore than in any other State or Province in India except Bengal. Out of

the total number of non-working dependants there are roughly 179 thousand males and 321 thousand females or in all 500 thousand persons of 15 years and over who are entirely unemployed. Of the males 79 thousand are literate and 100 thousand illiterate and of the females 73 thousand are literate and 248 thousand illiterate. Thus the literate unemployed population, 15 years and over, is 152 thousand and the illiterate unemployed of the same ages 348 thousand. The proportion of the unemployed is least among Muslims, somewhat higher among Hindus and the highest among Christians, the variations being greater in the case of females than in the case of males.* Again, taking some of the important Hindu castes, unemployment generally increases with the increase in literacy except in the case of Kammālās, which is evidently due to the spread of education not affecting the employment of artisans of this caste to the same extent as it affects some of the other castes. labouring classes like the Pulayas and the Thantans have the least literacy and also the least unemployment.

General characteristics of the people.

The people of Travancore with the exception of certain backward communities are handsome, clean in habits, and lead a well-ordered and com-Appearance. fortable life. The Nampūtiris occupy the highest position in the Malabar heirarchy of caste. Among the Brahmans, Ampalavāsis and other Hindus. Nāyars, and Vellālās possess a fair Antharala castes, complexion and well-defined regular features. So do the $ar{ ext{I}}$ lavās and to some extent the Nādārs. The males had their tufts of hair as a distinguishing feature, but now a major portion, particularly the younger generation, have their hairs The Pulayas, Kuravas, Parayas and other labouring classes have generally a darker complexion. The hill tribes have certain peculiarities in stature and appearance.

^{*} Travancore Census Report, 1931, p. 256.

The Syrian Christians are quite like the higher Hindu castes in complexion and in build. A few families trace their descent from Syrian immigrants but the bulk of Syrian Christians belong to the same race as the Hindus among whom they live. In the old days some of them used to wear front tufts like their Hindu neighbours, but the practice has now been completely abandoned. Association of the various communities with one another and changes in dress and manners brought about by education have fostered a similarity of customs and habits except in matters of faith and ceremonies which have a religious background. They do not wear ear-rings or bore their ears. The Romo Syrians and other Catholics wear a small cross suspended by a string passing round the neck.

The Muslims have generally a good physique. They generally shave their heads and wear a skull-cap or turban.

Except in Shenkötta and some of the southern taluks where Tamilians preponderate and in certain other towns,

houses are isolated. The dwellings are Dwellings. invariably located in the midst of separate compounds planted with trees and containing out-houses, wells, tanks and other conveniences according to the means of the owners. The people in the rural parts are mostly agriculturists and their houses are so designed as to contain suitable provisions for threshing, drying and storing grain, for feeding and keeping their cattle and for preserving the various agricultural implements. Necessarily the lodgings are usually situated in the vicinity of the cultivated areas. The habitations of the poor people are of mud-walls and roofs thatched with plaited cadjan or palmyrah leaves, sometimes with grass. The well-to-do have houses built of brick, chunam and wood. The richer classes live in strong and well-built houses with out-houses and other provisions for comfortable residence. But great changes are to be seen in the design and architecture of the buildings put up in recent

times. With the development of trade and improved means of communication strong building materials, such as, iron girders, tubes and railings, bricks, chunam, cement, tiles, etc., are easily available in all parts of the country, and beautiful buildings with up-to-date provisions for ventilation and drainage are rapidly increasing even in the nooks and corners of the State.

A Nampūtiri's residence known as Illam or Mana usually stands within a large compound in the centre of his Jenmam properties. It is surrounded by a garden which is well-planted with fruit-trees, edible vegetables and roots. Each compound has its own wells and tanks. A Kavu or grove at its north-west corner is set apart for the worship of Nagas (Serpents). The house is generally quadrangular in shape and is provided with court-yards and out-houses. The residences of the Malayāli Kshatriyās, Ampalayāsis Nāyars and Ilavas are more or less similar to those of the Nampütiris. At twilight and for some time after, the old brass lamps are lighted in conservative households. Fairly well-furnished drawing rooms are provided in the houses of the well-to-do and educated. Chairs, tables, mirrors and other articles of luxury are common. Brass lamps which were in vogue are being replaced by kerosine lights or electric lights where power is available. But the habitations of the labouring classes have not improved to any appreciable extent. Pulayas for the most part live in the midst or on the sides of the fields in which they work. The Parayas, on the other hand, prefer to retain the old habit of living in huts clustered in places generally away from other habitations. But thanks to the benign interest evinced by the rulers of the State in the amelioration of the condition of these poor people, and to the labours of the Sadhu Jana Paripalana Sangham, the Sambavar Elevation Committee and the Harijan Sevak Sangh, much has been done in recent years to improve the sanitary condition of the habitations of the backward communities.

Simplicity and elegance in dress is a characteristic feature of the people of Travancore as it is of the people of the Malabar coast generally. The dress of Dress. the males is more or less similar in the case of all the communities speaking Malayalam. They generally wear a loin cloth round the waist and leave the upper part of their bodies and heads exposed. This is due to the fact that the climate of Malabar is free from extremes. The quality of the cloth varies according to the means of individuals. The more advanced communities are scrupulous about the neatness of the clothes worn by them. While going out they wear an upper cloth over their shoulders. On festive occasions the upper garment is usually a cloth of finer texture with artistic borders frequently of lace. Shirts and coats are becoming very popular even in rural areas.

Malavāli women, whatever be the caste, are fond of white dress, though in recent years fashions ruling in other communities are being copied. The manner of dressing, however, sometimes varies especially among the women of the different communities. The Malayali Brahman women cared little for refinement in dress and were content to follow in the way of the time-honoured simplicity and cheapness. The educated section of women and those who follow their lead are adopting innovations in dress which bring them nearer to the general types of dressing in vogue in India. The use of silks and Saris is becoming common among the wealthier classes. Jackets are in common use among all classes, but the fashions vary with different castes. Among the non-Malayali Brahmans the dress of the males of all sects is similar, though that of the women slightly varies with the different divisions. Widows generally wear white clothes. The Syrian Christian women dress in their own particular fashion. The Muslims, both men and women, like to wear dress of the customary pattern which distinguishes their appearance from that of the members of other communities. The White Jews wear

loose trousers and a long tunic surmounted by a coloured waist-coat buttoned up to the chin. The males shave their heads but keep love-locks between the temple and the ear on each side of the head. Like the Muslims they wear small circular caps on their heads. Their women wear trousers and shirts while at home, but put on a gown and shawl when they go out. They grow the hair and tie it into a knot behind. They wear slippers and cover their heads with kerchief when they appear in public.

The Hindus generally wear the sacred ashes or sandal paste on the forehead. There are, however, certain differences in detail in the caste marks Caste marks. worn by the different sections of Brahmans. The marks of the Iyengars resemble a trident and consist of two white vertical line with a red or vellow one in the centre. The Thengalai and Vadagalai marks differ. The Madhvas make a vertical straight black line on the fore-head with the charcoal from the incense offered to god and a black dot in the centre. They also have the symbols of Vishnu on their forehead, shoulders and breasts. The full mark of the Smarta is formed of three horizontal lines on the forehead, breast and arms with Vibhūti (sacred ashes). The Iyengār women wear a vertical red mark and a horizontal white one at its foot between the eye-brows, while the Smarta and Madhva women have a round mark of Kumkumam (vermillion) on the forehead. The Bhasmakuri and the pottu on the forehead with sandal paste are fashionable among the Hindus of all castes. Women wear the Chantu and Kumkumam pottus.

In former days each caste had its own variety of ornaments, particularly for the women. Certain people ornaments.

were prohibited from using ornaments usually worn by those of the higher classes.

But these restrictions have disappeared one after another.

A Nampūtiri wears but a few ornaments on his person. They consist of finger rings made of gold, set with precious stones. He bores his ear, but does not wear earrings. The older ones generally wear necklaces of iudrāksha or thulasi beads mounted in silver or gold. Nampūtiri females are generally prohibited to wear valuable ornaments. They wear bracelets made of brass or bell-metal, and sometimes even of silver, but never of gold. They have no ornaments for the nose or the head. They do not plait their hair. They can, however, have a gold ornament on ear lobes and adorn their necks by a string made of cotton thread with a thali hanging by it. But these restrictions are not strictly observed now. A widow casts off her thali but retains her other ornaments. She does not shave her head like the non-Malavali Brahman widow. Among the non-Malayali Brahmans the males wear ear-rings and rings for the fingers. The females are generally very partial to their personal ornaments. They have ornaments for the head, nose, ears, neck, arms, hands, fingers, waist and feet. The necklace forms the most important ornament and there are several varieties of it. The thali or the wedding ornament consists of an M shaped piece of gold, solid or hollow, which hangs by a gold or cotton string. The thali is never removed so long as the husband is alive. The wedding ornament of a Konkanastha Brahman woman is an oblong pendant made of pure gold, with the figures of the sun and the crescent engraved thereon. Her other ornaments are massive and old fashioned. The women of the Tamil-speaking communities other than Brahmans have each class its distinctive ornaments.

As a class the Nayars do not wear much jewelry. The only ones commonly used by the males are ear-rings of gold, set with precious stones, rings for the fingers and a silver or gold zone for the waist. The women have ornaments for the ears, the nose, the neck, the arms, the waist and the ankles, though none for the head like Tamilian

women. The tendency among the younger women now is to limit the number of ornaments to a gold chain of artistic workmanship for the neck, a pair of kammels set with dismonds or rubies for the ears, gold bangles of different natterns for the wrists, gold rings for the fingers and, in the case of girls, a pair of Kolusus in gold or silver for the ankles. The Ilavas have the same taste in matters of jewelry as the Nayars. The Syrian Christian women used to bore their ears in several places and wear heavy gilt brass rings. They wear necklaces besides thalis consisting of twenty one beads set in the form of a cross. They had ornaments for the ears, neck, fingers and ankles which, however, were seldom used after the first or second delivery. They are now falling into line with the women of the other Malayali communities and are wearing simpler up-to-date ornaments. Among the white Jews the males wear rings on the fingers and gold buttons for their waist coats, while the personal ernaments of their women consist of gold pendants for the ears, golden necklaces as well as other neck ornaments in silver symbolical of marriage.

Rice is the staple food of the people. The Brahmans. Malayāli Kshatriyās and Ampalavāsis are vegetarians. They are not permitted to partake of Food and drink. animal food or spirituous liquors. Mayars and the Ilavas are not vegetarians though many avoid meat and fish, whole families sometimes avoiding them altogether. The Christians and the Muhammadans do not differ much from their neighbours in their dietary but fish and meat are more largely in use among them. backward communities like the Pulayas and the Parayas cannot afford any but coarse food. They are flesh eaters but the Pulavas generally eschew beef. Conji or rice grael in the morning, a more substantial meal at mid-day and supper after sunset form the daily routine of the middle class Malayalis of all castes. But the conji is being

supplanted by tea, coffee, cocoa or other beverages. There is the drinking habit among some of the lower classes. Toddy is considered both as a food and an intoxicant.

The young men amuse themselves with the foot-ball at certain seasons and with the 'Kuttiyum kölum', 'Chelkali',

'Kalichikali', 'Kampithāyam or Elunāyum puliyum'. Chess, cards and dice are among the favourite indoor games of the older people. The women have their own amusements. The Kathakali was much in favour with the Malayālis, but its popularity waned after the advent of modern dramatic performances and cinema shows. It is now reviving. Hunting, wherever there is convenience for it, is a favourite sport.

The Thiruvāthira kaļi is a pretty dance being the most popular play of Nampūthiri, Kshatriya and Nāyar females. Their other games are Pārakaļi, Vaṭṭukaļi, Ammāna and Ūnjōl swinging with its accompaniment of the Ūnjōl pāṭṭu. Women also learn and recite the Kai-koṭṭipāṭṭu, the Thiruvāthira pāṭṭu and the Ūnjōlpāṭṭu. The Ūnjōl is a favourite form of amusement with the Nāyar women. Foreign games are also becoming common. Growing interest is evinced in dramatic performances and cinema shows.

As regards the social amusements of the Syrian Christians, which were very popular until they were censured by the Synod of Diamper (1599 A.D.), Mr. K. E. Job says: "In the month of August, all Malabar, Hindu and Christian alike, used to celebrate a national festival called *Onam* which was attended by sham fights and sports........ Another social amusement of the Malabar Christians was a national dance called *Margom Kali* and *Parisamuttu Kali*. In both these social functions an old-fashioned brass lamp was placed on the floor and the dancers, usually twelve in number, used to go round the same (wearing peacock

feathers on their heads) with measured steps, singing religious songs about St. Thomas and the Blessed Virgin Mary. They remind one of the Yathrakali Pattu of the Brahmins, of the miraculous plays of Europe and similar social amusements of Babylonia. Some of the songs now used are rather modern, or better, modernised versions of ancient songs".*

Each caste has its own ceremonies. The Hindu section of the Malayālis have their ceremonies modelled on those of the Nampūthiris mutatis mutatis. Some of the more important ceremonies of the Nampūthiris are briefly described.

The Samskārās and other ceremonies of the Nampūthiri, as with the Brahmans elsewhere in India, begin with the very birth of the child. They are:—

Jāthakarmam ceremony (birth ceremony). Immediately after the birth of a child its father, after having a look at its face, bathes, and then, placing the child on his lap, makes gifts to Brahmans in commemoration of the happy event. He then mixes a little quantity of ghee and honey together and pours a few drops into the mouth of the infant with a spoon or rod to symbolise good fortune. This is accompanied by a recital of vēdic hymns.

Nāmakaranam (Naming ceremony). This comes off on the twelfth day after the birth of the child. After the usual preliminaries the father places the child on his lap and whispers the name of the child in its right ear. The latter act is done by the mother also. Presents are then distributed in honour of the event.

Nishkramanam. When the child is six months old the Annaprasanam takes place. This is the first feeding with rice. The baby is then taken out of the house for the first time on an auspicious day.

^{*} The Syrian Church of Malabar; Its cultural contributions, K.E. Job, p. 22.

Anna prāśanam. This is the first feeding of the child with rice and generally takes place on an auspicious day when the child is six months old.

Chaulam (tonsure) means the shaving of the child's head for the first time. This is performed both on boys and girls in the third or fifth year of their age. In the case of boys the ceremony is the fixing of the Kudumi or tuft of hair, while in the case of girls it is only chipping one or two hairs.

Vidyārambham or initiation into the letters of the alphabet is gone through generally in the fifth year of the boy's age. It usually takes place on the Vijaya Daśami Day (10th day of Dasserah) in October, but other auspicious days may also be availed of.

Upanayanam (literally leading a boy to his Guru) is the investiture of the boy with the sacred thread. It is generally performed in the eighth year. It is this ceremony which makes him dvija or twice-born and authorises him to take part in any religious rite or recite the Gāyathri. With the Upanayana the boy enters a new order of life called the Brahmacharya Āśrama. The Brahmachāri wears only a a Kaupīnā in addition to the strap of Krishnājina worn like the thread and the danda or stick of the Palāśa tree (Butea frondosa) in his right hand. A twist of Munja grass is worn round the waist. He must bathe daily and perform his Sandhyāvandanams at the three sandhyās (sunrise, noon, and sunset). He must also perform the Samitādhānam (oblation of fuel to the sacred fire).

Samāvarthanam. This marks the completion of the Brahmacharyāśrama. On an auspicious day, after bathing and going through the morning ablutions, the Brahmachāri performs Nāndi and hōmams. He then parts with the symbols of the Brahmacharyāśrama, viz., the Krishpājina and the grass waist ring, delivering them into the hands of the preceptor and another Brahman. The whole of that day he remains indoors without looking at the sun, and in the

evening he sets out and looks at the moon and the stars. He is then considered to have passed the stage of Brahmacharyam and to be qualified for the Grihasthasrama or marital state.

Marriage. Before starting for the bride's house the bride-groom partakes of a grand feast known as Ayani ūņu along with his relations and guests. He then starts in procession with all his friends and relatives and a number of Navars. At the bride's house he is received by the father of the bride who holding his hands offers him his daughter in marriage, pronouncing certain sacred texts. The bride-groom bathes and dresses himself in the new cloth and Angavastram (upper garment) presented by the bride's father and takes his seat on a plank placed for him. At the auspicious hour the thali brought by the bride-groom is tied round the bride's neck by her father and not by the husband as in the case of the other Brahmans. The Panigrahanam is accompanied by a recital of mantras and the usual benediction of the assembled Brahmans. The next item of the ceremony is Mukhadaréanam in which the pair are brought face to face with the chanting of the vedic hymn. Next comes Udakapūranam, i. e., the father of the bride pours a little water into the hands of the bride-groom through those of the bride accompanied by the words Sahadharmam charatha (may you both tread the path of duty together) and gives to the bride the dowry which she in turn hands over to the bride-groom.

A curious custom among the Yajur Vēdic Nampūtiris deserves a passing mention. It consists in the simulation of fish-catching, the husband and wife standing in knee-deep water and improvising a net with a piece of cloth. The well-known fecundity of fishes is perhaps believed to be an augury for the birth of several children. Some writers are of the opinion that this is a vestige of an ancient custom which was common among the Aryans before they immigrated to Kēraļa.

Pumsavanam, the object of which is the begetting of

male issue. It is performed on a Sunday, Monday or Thursday in the third month of conception.

Simuntham which is performed in the sixth or eighth month of pregnancy.

These ceremonies which are the more important of the Shōdaśakriyās are obligatory on the other Brahmans also with certain material differences in the rituals observed. The Malayāļi Kshatriyās and the Ampalavāsis perform most of these ceremonies with slight modifications. The Sāmantās and Nāyars also observe some of them bereft of the mantric functions.

Besides the Samskārās mentioned above other ceremonies were also in vogue among most of the communities, particularly the advanced ones. Such, for instance, were those conducted in connection with the first mensus of a girl, birth-days, the completion of the observance of certain Vrathams or fasts, etc. Funeral ceremonies had to be performed and pollutions observed at births and deaths, the nature and period of these ceremonies varying from community to community. In view, however, of the unnecessary recurring expenditure involved and of the increasing severity of the struggle for existence, many of these expensive ceremonies have ceased to be performed at least on the grand scale in which they were wont to be celebrated in by-gone days.

Marriage continues to be the most important ceremony with all the castes. Though varying in details with different communities, it is in essence an imitation of the Brahman marriage. Certain special features of the ceremony, as it obtains among some of the castes, are mentioned below:—

The Konkanastha Brahmans differ from the other Brahmans in the following respects:— Custom enjoins the marrying of one's maternal uncle's or paternal aunt's daughter and the practice almost amounts to an injunction. During the whole period of the five days of marriage the

married couple eat and sleep in the same apartment. The Kanyakādānam or the giving away of the bride takes place on the fourth day. Mangalyadhāraṇam is considered to be the principal element of the marriage, while it is the Saptapadi which is important among the other Brahmans.

Marriage among the Nāyars may mean either the formal ceremony of tying a thāli round the neck of a girl, accompanied by festive celebrations, known as the *Thāli-kettu* or *Kettukalyānam*, or the ceremony of actual alliance as husband and wife, known as the Sambandham or Pudavai koda (literally cloth-giving). The former has degenerated into a mock-marriage and has almost ceased to exist. The Sambandham (Vivāham) is the true wedlock.

Sambandham. There is no prescribed religious ceremony of any particular character on occasions of marriage. A proposal is made first by the husband or his relations to the intended wife's relations. This done, the horoscopes of the bride-groom and his intended bride are examined by an astrologer and, if they are found to agree, an auspicious day for the union is fixed. On the appointed day the bride-groom with his friends and relations goes to the bride's house, where at the gate they are received by the bride's party and are conducted to the special seats provided for them. At the auspicious hour the bride is led out by her aunt or other elderly lady and the bride-groom formally presents her with the costly wedding cloth kept on a silver plate. After receiving the cloth the bride makes obeisance to the bride-groom and the assembled elders and returns to her chamber; the guests are then treated to a sumptuous feast and the whole ceremony comes to a close with the distribution of flowers and pansupari to the assembled guests.

Among the Krishnanvakakkār, on the day of the marriage the bride-groom goes in procession to the house of the bride, sword in hand, superbly and martially clad. The bride-groom's sister carries a plate containing a cloth and

the thali and enters the apartment where the bride is seated in marriage attire. The bridegroom is conducted to the pandal where the relatives and the villagers are all assembled. In the room where the bride is seated the bridegroom's sister ties thali round her neck. The maternal uncle conducts the bride to the marriage mandapam and seats her by the side of the bridegroom. He then recants the names of all ancestors of both the parties and loudly declares that the daughter of such and such a man in such and such a family is wedded in holy matrimony to a member of such and such a family. He winds up the ceremony by pouring water into a cadjan leaf held by the bridegroom and the bride. The bridal pair thereafter retire from the gathering. The feasting over, the bridegroom returns with the bride in procession to his own house. The rest of the festivities, which last for seven more days, are gone through in the bridegroom's house. On the seventh day the married couple repair to the bride's house. The hasband immediately obtains the status of legal guardian of his wife and is entitled to keep her at home however young she may be.

In the matter of ceremonial observances there is not much difference between the Īlavas and the Nāyars. Formerly the Thālikeṭṭu had to be performed before puberty. But the trend of opinion in the communities concerned is against the continuance of the Thālikeṭṭu as a ceremony distinct and separate from actual marriage. The tying of the thāli is now very common in Nāyar marriages and is done in addition to the presentation of cloth; but the law does not prescribe it as a condition of a marriage legally valid. But among the Īlavas the tying of the thāli is as much an essential of marriage as the presentation of cloth by the husband to the wife.

Among the Nadars betrothal is always observed as a formal ceremony. On the appointed day the bridegroom moves in procession to the bride's house. The bridegroom

and the bride seat themselves on a plank and the former ties the śankuthāli with one or more conch-like ornaments on either side. They then rise from their seats and go round the marriage platform thrice hand in hand. After the other ceremonies are gone through, the marriage feast begins, and when that is over, the married couple start in procession for the bridegroom's house.

The Parayas attach no religious significance to marriage. The guests assemble, the priest sings songs to the accompaniment of music and some of the guests dance. When the auspicious moment arrives, the bridegroom ties the thali, which consists of shanks and shells strung together, round the bride's neck and all his friends clap hands loudly. This is followed by a feast.

Among the Pulayas, on the morning of the appointed day, the bridegroom goes to the bride's house with his relatives. Before he enters the marriage pandal, the bride goes round it seven times with seven Pulaya women carrying lighted lamps in front of her. After some preliminary ceremonies the sister of the bridegroom ties the thali. A present of twenty-two fanams (Rs. 3 a. 1 p. 5) is given to the bridegroom's relative. In the night the bride and bridegroom eat out of the same vessel. Early next morning the bride is taken to the bridegroom's house.

The Jacobite and Mar Thoma Syrians usually celebrate marriages on particular days of the week, the former on Sundays and the latter on Mondays or Thursdays. The bridegroom ties a small golden ornament called 'minnu' round the bride's neck and presents a cloth (Neriathu) to her. For the Catholics the marriage must be blessed by the parish priest or his delegate. The marriage ornament is usually a thali or a ring. When the bridegroom and bride join hands as a sign of their mutual consent, love and inseparable union, the priest blesses the union first and

then the thali or ring as the case may be. This is followed by the bride-groom tying the thali round the bride's neck or putting the ring on her finger. The ceremony is brought to a close by the priest invoking the blessing of God upon the married couple followed by the holy sacrifice. With the Pentecosts and the followers of the Brother Mission marriage is simpler. Neither 'minnu' or ring is used by them.

With regard to the social ceremonies observed by the Syrian Christians in earlier times, Dr. P. J. Thomas of the University of Madras says:-"Until recently Christians observed nearly all the social ceremonies of high caste Hindus. At birth, marriage and death nearly the same ceremonies were in vogue. When a child was born, an horoscope was cast and various Hindu ceremonies were performed. When a person died, his descendants used to observe pula or pollution for about 15 days and this terminated with the pulakuli, a family feast in which only vegetables were served. The habit of eating meat is either a survival of the Pre-Buddhist custom in Malabar or is an introduction by Syrian colonists, but beef and pork were strictly avoided, following Hindu tradition.... However, even today, the pulakuli and other feasts connected with death were observed without any of these exotic accompaniments. The anniversary of the death was kept by the observance of the sradha festival as in the case of high caste Hindus. The customs connected with sradha are also surprisingly similar. . .

Marrriage customs.

In olden days the Syrian marriage was an elaborate deremony lasting several days and was accompanied by numerous rites, each observed with suitable songs and dances. Girls were married at an early age and dowries have always been common. Formerly the dowry was given in the form of gold or jewels. The tying of the tali was the principal ceremony and this is performed in the church

along with sacramental service. On the day previous to the wedding, the chief rite is the ceremonial shave in the bride-groom's house and the dyeing of hands with henna (322) in the bride's house. On the wedding day, the bride-groom and bride proceed to the church, each with his or her party, and after wedding, both parties join in solemn procession to the bride-groom's house, where a reception takes place. The couple were formerly taken in palanquins, and in some cases elephants were also used, as a mark of family distinction......It was also customary to crown the bride-groom and the bride after wedding. A party of women usually accompanied the procession home, sounding Kuravili (ulul), and among the 'Sudhist' Syrians women still sing at the reception and play the Vattakali dance. The bride and bride-groom must be received by the mother with the ceremonial throwing of flowers, paddy and water, and with maids bearing brass vessels; and when they are seated on the dais (manarkolam) there follow various ceremonies, chief of which being the giving of sweets to them by an elder. Music then begins and betel will be distributed to the guests. The feast will follow, mostly in vegetarian style, and while this is going on, the Panan, the hereditary bard of Malabar, will sing the glories of Syrians in quaint old lays. On the fourth day, a peculiar rite called Adachu thura (the solemn opening of the door) and ceremonial bath (chathurtha Snanam) take place, and there are interesting songs and rites connected with both. The following morning, the bride-groom makes presents to his relations and the guests depart after blessing the wedded couple. The ceremony connected with this is performed around a brass lamp, the bride-groom and bride separately making a solemn procession round it, accompanied by the best men and brides-maids. The couple then depart for the bride's home. Thus ends the wedding."

Among the Muslims no particular auspicious days or months are chosen for marriage by the Jōnaka Māppiļlās as

is done by the Hindus. The ceremony is conducted in the presence of a priest, the relatives of the couple and the villagers. The ceremony lasts for seven days or four days according as the girl is married for the first time or a second time. The ceremony is usually conducted at night, though the Quran does not contain any express provision for it.

The Jews have no faith in the consultation of horoscopes; nor have they any astronomical scruples in fixing the day of the marriage. Engagement, betrothal and actual wedding are the three essential features of their marriage. The ceremony lasts for seven days.

Of all the peculiarities which are associated with marriage none have impressed themselves so distinctly as the custom which prohibits the second marriage of a widow and the convention of enjoining the marriage of a daughter before she attains physical maturity. In the case of the higher castes both of these usages may claim a respectable antiquity. In the lower strata of society, on the other hand, they appear to have been developed, in the form which they have now assumed, at a comparatively recent date under the pressure of peculiar social conditions. Both, again, are looked upon by the people who observe them as badges of social distinction.

As regards inheritance, the different communities can be classified according as the system followed by them is patriarchal, matriarchal or a mixture of both. At the last census conducted in 1931, out of a total Hindu population of 3,134,888 persons 882,165 were makkathāyis, 925,902 marumakkathāyis and 1,326,821 followers of a mixed or doubtful system. The subjoined list classifies the Hindu communities according to the system of inheritance followed by each:—

Makkathāyis.

Ampattan, Arayan, Bharathar, Brahman. Chakkaravar, Chakkiliyan, Chetti. Ilayathu, Kammalan, Kaniyān, Kshatriya (Non-Malayāli), Kudumi. Marakkān, Marayan. Mukkuvan, Nādār. Nāyar. Pallan, Pāņan, Parayan Parayan,

Śāliyan, Vaṇṇān, Vētan.

Vellālan (Pāndi), Virasaivar, Yādavan.

Marumakkathāyis.

Ampalavāsi,
Kshatriya (Malayāļi),
Sāmanthan,
Vēļān (Excluding
Kuśavan),
Veļakkithalanāyar,
Veļuthādanāyar.

Followers of a mixed or doubtful system.

Īļavan,
Krishņanvaka,
Kuravan,
Pulayan,
Thantān,
Vālan,
Vēlan
Velļāļan (Nānjanād).

The Christians, the Muslims and the Jews are makkathāyis, but there are a few Muslims who follow the marumakkathāyam law.

4,544,185

TABLE I

GENERAL STATEMENT. Area in square miles 7,625 Number of towns and villages 3,982 (a) Towns 46 (i) municipal towns 19 (ii) census towns 27 (b) Villages 3,936 Number of occupied houses 9,29,930 (a) in towns 93,196(b) in villages 8,36,734 Number of families 9,32,312 (a) in towns 69,421 (b) in villages 8,62,891 Total population 5,095,973 551,788 (a) in towns 408,462 (i) municipal towns 143,326 (ii) census towns

TABLE II.

VABIATION IN POPULATION, 1921-1931.

(b) in villages.

| District | Popu | Percentage | |
|--------------------------|-----------|------------|--------------|
| District | 1931 | 1921 | of variation |
| STATE. | 5,095,973 | 4,006,062 | 27.2 |
| Natural divisions | | | |
| Lowland. | 2,389,549 | 1,923,497 | 24.2 |
| Midland. | 2,415,494 | 1,894,618 | 27.5 |
| Highland. | 290,930 | 187,947 | 54.8 |
| • | | | 34,10 |
| Administrative divisions | | | |
| Southern. | 1,433,956 | 1,156,373 | 24.0 |
| Central. | 1,861,472 | 1,487,178 | 25.2 |
| Northern. | 1,695,321 | 1,305,590 | 29.9 |
| High Range. | 105,224 | 56,921 | 84.9 |

TABLE III. DENSITY OF POPULATION FROM 1881-1931.

| | | Mean density per sq. mile | | | | | |
|-------------------------|-------|---------------------------|-------|-------|------|------|--|
| DIVISION | 1931 | 1921 | 1911 | 1901 | 1891 | 1881 | |
| STATE | 668 | 525 | 450 | 387 | 335 | 315 | |
| Natural divisions. | | | , | | | | |
| Lowland. | 1,743 | 1,403 | 1,220 | 1,078 | 942 | 896 | |
| Midland. | 892 | 700 | | 505 | 435 | 405 | |
| Highland. | 82 | 53 | 40 | 31 | 25 | 22 | |
| Administrative division | s. | | | | | | |
| Southern. | 963 | 776 | 663 | 564 | 488 | 473 | |
| Central. | 717 | 573 | 490 | 425 | 377 | 344 | |
| Northern. | 700 | | 467 | 407 | 346 | 330 | |
| High Range. | 94 | 51 | 36 | 19 | 13 | 6 | |

TABLE IV. TOWNS AND VILLAGES CLASSIFIED BY POPULATION.

| M. A Propulation group. | No. of towns and villages. | Pepulation. |
|--|----------------------------|--------------------|
| TOTAL. | 3,982 | 5,095,973 |
| Under 500 | 1,446 | 309.369 |
| 500— 1,000 | 867 | 309,369 637,111 |
| 1,000— 2,000 | 978 | 1,391,515 |
| 2,000 5,000 | 585 | 1,728,478 |
| 5,000 10,000 | 84 | 547,034 |
| 10,000— 20,000 | 15 | 176,341 |
| 20,000— 50,000 | 6 | 194,947 |
| 50,000—100,000 | 1 | 95,674 |
| Enumerated in encampments, railway premises, boats, etc. | - | 15,504 |

TABLE V.

POPULATION OF CHIEF TOWNS,

| No. | Towns. | Population. | Variation since 1921. |
|-----|--------------------------|-------------|--------------------------|
| 1 | Trivandrum. | 96,016 | 23,232 |
| 2 | \mathbf{A} lleppey. | 43,838 | 11,764 |
| 3 | Nāgercōil. | 42,945 | 8,539 |
| 4 | Quilon. | 33,739 | 8,604 |
| 5 | Kōttayam. | 25,236 | 6,403 |
| 6 | Changanāśśēry. | 24,201 | 5,246 |
| 7 | Parūr. | 15,176 | 3,227 |
| 8 | Thiruvalla. | 14,489 | 2,479 |
| 9 | Māvēlikara. | 14,194 | 1,985 |
| 10 | Vaikom. | 13,808 | 2,549 |
| 11 | Shenkētta. | 12,225 | 984 |
| 12 | Kāyamkulam. | 10,841 | 1,669 |
| 13 | Chengannūr. | 10,738 | |
| 14 | Attingal. | 10,612 | 436 |
| 15 | Haripād. | 10,387 | 1,688 |
| 16 | Padmanābhapuram. | 10,313 | 1,157 |
| 17 | Ampalapula. | 10,248 | 1,193 |
| 18 | Colachel. | 9,392 | 1,425 |
| 19 | Neyyāttinkara. | 9,254 | 1,231 |
| 20 | Punalūr. | 8,442 | 2,000 |
| 21 | Alwaye. | 7,621 | 849 |
| 22 | Iraniel. | 7,513 | 1,972 |
| 23 | Ettumānūr. | 7,477 | 1,868 |
| 24 | Ārāmboly. | 6,585 | , |
| 25 | Š ā mbūrvadakara. | 6,238 | ••• |
| 26 | Shērthala. | 5,940 | 1,159 |
| 27 | Perumpāvūr. | 5,863 | |
| 28 | Karunagappally. | 5,790 | 1,050 |
| 29 | Kottārakara. | 5,747 | 730 |
| 30 | Mūvāttupula. | 5,626 | 1,109 |
| 31 | Balafamapuram. | 5.362 | 2,280 |
| 32 | Thiruvithāmcōde. | 5,326 | 1,053 |

TABLE VI.

AGE.

| Age. | Persons. | Males. | Females. |
|---------------|-----------|-----------|-----------|
| All ages. | 5,095,973 | 2,565,073 | 2,530,900 |
| 0- 5 | 877,242 | 440,851 | 436,391 |
| 5—10 | 673,095 | 341,345 | 331,750 |
| 10—15 | 617,939 | 313,728 | 304,211 |
| 15—20 | 487,912 | 238,499 | 249,413 |
| 20—25 | 461,356 | 221,670 | 239,686 |
| 25—30 | 389,368 | 193,529 | 195,839 |
| 30—35 | 358,098 | 181,818 | 176,280 |
| 3540 | 288,368 | 150,647 | 137,721 |
| 40—45 | 251,634 | 131,767 | 119,867 |
| 45— 50 | 194,623 | 100,884 | 93,739 |
| 50-—55 | 165,984 | 86,050 | 79,934 |
| 5560 | 118,704 | 60,335 | 58,369 |
| 60—65 | 95,449 | 48,006 | 47,443 |
| 65—70 | 50,932 | 25,241 | 25,691 |
| ,70 & over. | 65,269 | 30,703 | 34,566 |

TABLE VII-

| Age and condition. | Persons. | Males. | Females. |
|--|---|---|---|
| All Ages. Unmarried. Married. Widowed. | 2,700,739 2,020,683 374,551 | 1,498,635 993,386 73,052 | 1,202,104 1,027,297 301,499 |
| Total. | 5,095,973 | 2,565,073 | 2,530,900 |
| 0—.5 Unmarried. Married. Widowed. | 877,242 | 440,851 | 436,391 |
| Total. | 877,242 | 440,851 | 436,391 |
| 5—10. Unmarried. Married. Widowed. | 670,131 2,872 92 | 340,936 388 21 | 329,195 2,484 71 |
| Total. | 673,095 | 341,345 | 331,750 |
| 10—15. Unmarried. Married. Widowed. Total. | 590,918 26,436 585 617,939 | $ \begin{array}{r} 310,930 \\ 2,722 \\ 76 \\ \hline 313,728 \end{array} $ | 279,988 23,714 509 304,211 |
| | $ \begin{array}{c c} 542,441 \\ 1,349,816 \\ 92,845 \\ \hline 1,985,102 \end{array} $ | 391,777 576,327 18,059 986,163 | 150,664 773,489 74,786 998,939 |
| 40 and over. Unmarried. Married. Widowed. | 20,007 641,559 281,029 | 14,141 413,949 54,896 | 5,886 227,610 2£6,133 |
| Total. | 942,595 | 482,986 | 459,609 |

TABLE VIII.

| Age | Population | No | No. of persons afflicted. | | | | |
|-----------------|------------|--------|---------------------------|--------|---------|--|--|
| | afflicted | Insane | Deaf- mutes. | Blind. | Lepers. | Persons afflicted with elephantiasis | |
| State—All ages. | 10,910 | 2,068 | 2,883 | 3,191 | 2,789 | 14,709 | |
| 0— 5 | 281 | 6 | 165 | 98 | 14 | 24 | |
| 510 | 627 | 35 | 385 | 162 | 47 | 85 | |
| 10—20 | 1,637 | 175 | 774 | 439 | 253 | 769 | |
| 2030 | 1,903 | 426 | 559 | 484 | 441 | 2,048 | |
| 3040 | 2,048 | 532 | 436 | 456 | 626 | 3,257 | |
| 4050 | 1,774 | 428 | 292 | 420 | 635 | 3,452 | |
| 50—60 | 1,370 | 284 | 154 | 433 | 501 | 2,820 | |
| 60—70 | 807 | 127 | 76 | 392 | 212 | 1,601 | |
| 70 & over | 463 | 55 | 42 | 307 | 60 | 653 | |

- N. B. (i) Figures for persons afflicted with elephantiasis are shown separately.
 - (ii) The population afflicted does not correspond with the aggregate of the figures for the several infirmities, since persons suffering from more than one infirmity have been shown under each head.

TABLE IX.
SELECTED OCCUPATIONS.

| Occupation. | Total No. following occupation | As principal occupation. | | As subsidiary occupation. |
|--|--------------------------------------|--------------------------|---------|---------------------------|
| STATE. | 2,901,085 | 1,478,226 | 929,906 | 492,953 |
| 1. Pasture and agriculture. | 1,167,451 | 785,190 | 118,338 | 263,923 |
| 2. Fishing and hunting. | 39,516 | 34,187 | 4,062 | 1,267 |
| 3. Metallic minerals. | 410 | 357 | 53 | ••• |
| 4. Non-metallic minerals. | 2,391 | 2,266 | 125 | ••• |
| 5. Textiles. | 145,845 | 82,676 | 47,914 | 15,255 |
| Hides, skins and hard materials from the animal kingdom. | 409 | 310 | 70 | 29 |
| 7. Wood. | 63,230 | 45,259 | 9,994 | 7,977 |
| 8. Metals. | 14,092 | 12,000 | 1,493 | 599 |
| 9. Ceramics. | 9,570 | 8,361 | 941 | 268 |
| 10. Chemical products properly so- called and analogous. | 12,370 | 10,746 | 864 | 760 |
| 11. Food industries. | 61,427 | 49,150 | 7,017 | 5,260 |
| 12. Industries of dress and toilet. | 44,557 | 36,596 | 5,560 | 2,401 |
| 13. Furniture industries. | 58 | 48 | | 10 |
| 14. Building industries. | 18,389 | 16,043 | 981 | 2,365 |
| 15. Construction of means of transport. | 1,273 | 1,027 | 113 | 133 |
| 16. Production and transmission of physical force. | 182 | 175 | 1 | 6 |
| 17. Miscellaneous and undefined industries. | 14,284 | 12,477 | 1,260 | 546 |
| 18. Transport by water. | 14,853 | 12,538 | 1,003 | 1.312 |
| 19. Transport by road. | 22,874 | 18,896 | 1,457 | 2;521 |
| 20. Transport by rail. | 2,032 | 1,942 | 55 | 35 |
| 21. Post Office, Telegraph and Telephone services. | 1,807 | 1,716 | 21 | 70 |
| 22. Banks, establishments of credit, exchange and insurance. | 4,089 | 2,827 | 92 | 1,170 |
| 23. Brokerage, commission and | | | | -,0 |
| export. | 452 | 383 | 5 | 64 |
| 24. Trade in textiles. | 3,903 | 3,200 | 166 | 537 |

TABLE IX.

SELECTED OCCUPATIONS. (Concluded)

| Occupation. | Total No. following occupation. | As principal occupation. | As work. ing de- pendants. | As subsi diary oc- cupation |
|--|---------------------------------|--------------------------|----------------------------------|-----------------------------------|
| 25. Trade in skins, leather & furs | 250 | 218 | 10 | 22 |
| 26. Trade in wood. | 10,983 | 10,133 | 294 | 556 |
| 27. Trade in metals. | 645 | 549 | 30 | 66 |
| 28. Trade in pottery, bricks & tiles. | 1,027 | 798 | 88 | 141 |
| 29. Trade in chemical products. | 1,331 | 1,117 | 90 | 124 |
| 30. Hotels, cafes, restaurants, etc. | 16,963 | 15,994 | 618 | 351 |
| 31. Other trade in food stuffs. | 99,280 | 78,362 | 7,937 | 12,981 |
| 32. Trade in clothing and toilet articles. | 333 | 251 | 23 | 59 |
| 33. Trade in furniture. | 1,318 | 1,082 | 79 | 157 |
| 34. Trade in building materials. | 2,667 | 2,667 | | |
| 35. Trade in means of transport. | 1,947 | 1,314 | 92 | 541 |
| 36. Trade in fuel. | 2,073 | 1,682 | 137 | 254 |
| 37. Trade in articles of luxury and those pertaining to letters and the arts and sciences. | | 1,408 | 96 | 114 |
| 38. Trade of other sorts. | 27,769 | 21,917 | 2,372 | 3,480 |
| 39. Army. | 1,758 | 1,726 | | 32 |
| 40. Police. | 2,173 | 2,134 | | 39 |
| 41. Public Administration. | 17,712 | 16,684 | | 1,028 |
| 42. Religion. | 20,770 | 17,004 | 1,540 | 2,226 |
| 43. Law. | 6,773 | 5,578 | 212 | 983 |
| 44. Medicine. | 9,636 | 7,588 | 392 | 1,656 |
| 45. Instruction. | 21,209 | 19,449 | | 1,760 |
| 46. Letters, arts and sciences. | 5,882 | 4,605 | 369 | 908 |
| 47. Persons living principally on | | | | |
| their income. | 3,499 | 2,780 | 101 | 618 |
| 48. Domestic service. | 864,534 | 18,928 | 697,350 | 148,256 |
| 49. General terms which do not indicate a definite occupation. | 1 | 102,781 | 15,301 | 10,895 |
| 50. Inmates of jails, asylums, alms-houses. | 1,264 | 838 | 426 | |
| 51. Beggars, vagrants, prostitutes. | 3,230 | 2,269 | 764 | 197 |

VI.

TABLE X. EDUCATION.

| 10 30 - 2 | Total. | Males. | Females. |
|-------------------------|-----------|-----------|-----------|
| All Ages (Total) | 5,095,973 | 2,565,073 | 2,530,900 |
| Illiterate. | 3,878,049 | 1,698,760 | 2,179,289 |
| Literate. | 1,217,924 | 866,313 | 351,611 |
| Literate in English. | 80,651 | 65,500 | 15,151 |
| Under 10. | | - | |
| Illiterate. | 1,456,386 | 725,670 | 730,716 |
| Literate. | 93,951 | 56,526 | 37,425 |
| Literate in English | 2,653 | 1,772 | 881 |
| 10—15. | f | · · | |
| Illiterate. | 458,527 | 215,244 | 243,283 |
| Literate. | 159,412 | 98,484 | 60,928 |
| Literate in English. | 7,552 | 5,254 | 2,298 |
| <i>15—20</i> . | ; |) } | |
| Illiterate. | 293,241 | 112,088 | 181,153 |
| Literate. | 194,671 | 126,411 | 68,260 |
| Literate in English. | 16,861 | 12,830 | 4,031 |
| 20 and over. | : | | |
| Illiterate. | 1,669,895 | 645,758 | 1,024,137 |
| Literate. | 769,890 | 584,892 | 184,998 |
| Literate in English. | 53,585 | 45,644 | 7,941 |

TABLE XI-

| | Language. | No. of persons speaking. |
|---|--|-----------------------------|
| | Vernaculars of India (14) | 5,091,006 |
| | Dravidian family (5) | 5 064 32 3 |
| | Dravidian group (4) | 5,054,468 |
| | 1. Malayālam Vernaculars | 4,260,860 |
| | 2. Tamil for the State. | 788,455 |
| | 3. Thulu. | 3,196 |
| | 4. Kānarese. | 1,957 |
| | $\mathbf{\bar{A}}$ ndhra group (1) | |
| | 5. Telugu. | 9,855 |
| | Indo-European family | |
| | Indo-Aryan branch (9) | 26,68 3 |
| | 6. Konkani. | 12,175 |
| | 7. Marathi. | 7,054 |
| | 8. Western Hindi. | 4,552 |
| | 9. Gujarāthi. | 2,275 |
| | 10. Sindhi. | 247 |
| | 11. Bengāļi. | |
| | 12. Punjābi. | 76 |
| | 13. Sanskrit. | 23 |
| | 14. Naipāļi. | 1 |
| | Languages not returned. | 113 |
| | Vernaculars of other Asiatic Countries (6) | 3,596 |
| | 1. Arabic. | 3,458 |
| | 2. Sinhalese. | 54 |
| | 3. Persian. | 40 |
| | 4. Hebrew. | 39 |
| | 5. Chinese. | . 3 |
| | 6. Syriac. | 2 |
| | European Languages (9) | 1,371 |
| ' | 1. English. | 1,199 |
| | 2. Portuguese. | 1,100 |
| | 3. German. | 34 |
| | 4. Spanish. | 22 |
| | 5. Flemish. | 14 |
| | 6. Italian. | |
| | 7. Gaelic. | 7 3 2 2 |
| | 8. French. | ວ ຄ |
| | 9. Norwegian. | 4 |

TABLE XII

RELIGION.

| Religion. | Number. | Proportion per 10,000 of total population. |
|---------------------------------|-----------|--|
| All religions. | 5,095,973 | |
| Hindu including Aryas & Brahmos | 3,134,888 | 6,152 |
| Christian. | 1,604,475 | 3,148 |
| Muslim. | 353,274 | 693 |
| Tribal Religions. | 2,907 | 5.7 |
| Jew. | 298 | |
| Buddhist. | 64 | |
| Jain. | 41 | |
| Parsi. | 13 | -8 |
| Sikh. | 12 | |
| Unspecified. | 1 | |

TABLE XIII.
CASTE, TRIBE, RACE OR NATIONALITY.

| Serial No. | Caste, Tribe, Race or Nationality | | Persons | Males | Females |
|---------------|--------------------------------------|---------------------------------------|-----------|------------------|---|
| | | STATE. | 5,095,973 | 2,565,073 | 2,53 0 , 9 0 0 |
| 1 | Aiyanavar | ••• | 6,414 | 3,313 | 3,101 |
| 2 | Ampalavāsi | ••• | 8,155 | 4,205 | 3,950 |
| 3 | Arayan | ••• | 27,000 | 13,755 | 13,245 |
| 4 | Bharathar | ••• | 8,944 | 4,497 | 4,447 |
| 5 | Brahman | ••• | 68,072 | 34,731 | 33,341 |
| 6 | Catholic Arasar | | 22,560 | 11,511 | 11,049 |
| 7 | Chackaravar | ••• | 5,644 | 2,919 | 2,725 |
| 8 | Chakkiliyan | ••• | 6,328 | 3,193 | 3,135 |
| 9 | Chetti | ••• | 17,422 | 8,665 | 8,757 |
| 10 | Ilavāņiyan | * | 6,411 | 3,205 | 3,206 |
| 11 | Īḷavan | ••• | 872,174 | 434,091 | 438,083 |
| 12 | Īļavāthi | ••• | 6,955 | 3,238 | 3,717 |
| 13 | Kammāļan | ••• | 209,068 | 104,889 | 104,179 |
| 14 | Kāṇikkāran | | 6,659 | 3,525 | 3,134 |
| 15 | Kaņiyān | ••• | 15,652 | 7,905 | 7,747 |
| 16 | Kāvathi | • • • • | 3,696 | 1,810 | 1,886 |
| 17 | Kēraļamuthali | | 3,005 | 1,518 | 1,487 |
| 18 | Krishņanvaka | | 12,032 | 6,110 | 5,922 |
| 19 | Kshatriya | •••• | 3,673 | 1,999 | 1,674 |
| 20 | Kudumi | ••• | 9,610 | 4,997 | 4,613 |
| 21 | Kuravan | | 95,295 | 45,949 | 49,346 |
| 22 | Malayafayan | ••• | 3,182 | 1,606 | 1,576 |
| 23 | Maravan | · · · · · · · · · · · · · · · · · · · | 14,399 | 7,398 | 7,00 1 |

TABLE XIII. (Concluded) CASTE, TRIBE, RACE OR NATIONALMY.

| Serial No. | Caste, Tribe, Race or Nationality | | Persons | Males. | Females. |
|---------------|--------------------------------------|-----|---------|---------|----------|
| 24 | Mukkuvan | | 31,135 | 15,785 | 15,350 |
| 25 | Muslim | | 353,274 | 180,555 | 172,719 |
| 26 | Nādār (Chānnān) | | 402,555 | 205,467 | 197,088 |
| 27 | Nāyar | \ | 868,411 | 431,154 | 437,257 |
| 28 | Nulayan | | 3,129 | 1,584 | 1,545 |
| 29 | Pallan | | 32,105 | 17,119 | 14,986 |
| 30 | Pāṇan | | 3,812 | 1,910 | 1,902 |
| 31 | Paravan | ••• | 14,477 | 7,174 | 7,303 |
| 32 | Parayan (Sāmbavar) | ••• | 142,364 | 72,158 | 70,206 |
| 33 | Pulayan (Chēramar) | | 365,150 | 183,815 | 181,335 |
| 34 | Śāliyan (Pattāryan) | | 12,386 | 6,044 | 6,342 |
| 35 | Syrian (Christian) | | 948,514 | 481,905 | 1 |
| 36 | Thantān (Ūrāļi) | | 41,214 | 20,838 | 1 |
| 37 | Ullatan (Kochuvelan) | ••• | 5,121 | 2,242 | |
| 38 | Vālan | ••• | 21,172 | 1 | ŀ |
| 39 | Vāṇiyan | ••• | 23,188 | 11,701 | } |
| 40 | Vannān | | 16,022 | 8,032 | 1 |
| 41 | Velakkithalanāyar | | 30,603 | 15,259 | 1 |
| 42 | Vēlan | | 16,253 | 8,070 | 1 |
| 43 | Vēļān (Kuśavan) | | 12,377 | 6,188 | 1 |
| 44 | Vellālan | | 70,705 | 35,548 | 1 |
| 45 | Voluthādanāyar | | 14,878 | 7,331 | |
| 46 | Vētan | | 11,737 | 5,919 | |
| 47 | Vīrasaivar | | 19,558 | 9,935 | 1 |
| 48 | Yādavan (Idayan) | | 8,45 | 7 4.075 | 4,385 |

TABLE XIV.
CASTES CLASSIFIED ACCORDING TO THEIR TRADITIONAL OCCUPATIONS.

| Group and Caste. | | Strength. | Proportion per mille of population. | |
|-------------------------------|-------|-----------|---|--|
| STATE. | | 5,095,973 | | |
| Accessory service in temples. | ļ | | | |
| Ampalavāsis | ••• | 8,155 | 1.6 | |
| Fisherman. | | 24 222 | _ | |
| Arayan | ••• | 27,000 | 5 | |
| Vālan | ••• | 21,172 | 4 | |
| Priest. | 1 | | | |
| Brahman | ••• | 68,072 | 13 | |
| Trader. | | | N | |
| Chetti | | 17,422 | 3 | |
| Toddy-drawer. | | | | |
| Ilavan | | 872,174 | 171 | |
| Nādār (Chānnān) | • • • | 402,555 | 79 | |
| Artisan | | | | |
| Kammāļan (Viśwakarma) | | 209,068 | 41 | |
| Astrologer. | | | Ì | |
| Kaniyan | | 15,652 | 3 | |
| Agriculturist. | | - | | |
| Krishnanvaka | | 12,032 | 2 | |
| Nāyar | | 868,411 | 170 | |
| Vellalan | | 70,705 | 14 | |
| Labourer. | | | | |
| Kuravan | | 95,295 | 19 | |
| Pallan | | 32,105 | 6 | |
| Parayan | | 142,363 | 28 | |
| Pulayan | | 365,150 | 71 | |
| Lime-shell burner. | ••• | , | , - | |
| Paravan | | 14,477 | 3 | |
| Weaver. | | , _, | | |
| Saliyan | | 12,386 | 2 | |
| Tree-Climber. | ••• | 1 | | |
| Thantān (Ūrāļi) | | 41,214 | 7 | |
| Oil presser. | ••• | 12,011 | • | |
| Vaniyan | | 23,186 | 1.5 | |
| Washerman. | ••• | 20,100 | 10 | |
| Veluthādanāyar | | 14,878 | 3 | |
| Barber. | ••• | 14,010 | ١ | |
| Vėlakkithalanāyar | | 30,603 | 6 | |
| Sorcerer. | ••• | 00,000 | 0 | |
| Vēlan | | 16,253 | 3 | |

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CHAPTER VII.

LANGUAGE

There are, on the whole, 29 languages spoken in Travancore. Of these Malayalam is the mother tongue of 4,260,860 persons and Tamil that of 788,455 persons in an aggregate population of 5,095,973. In other words, about 84 per cent. of the population speak Malayalam, and 15 per cent. Tamil, both together constituting as much as 99 per cent. of the total population. The remaining one per cent., i.e., 46,658 persons speak as many as 27 other languages. Malayalam and Tamil alone deserve any particular consideration in this account.

The distribution of languages by locality is as follows:— Out of every 1,000 Malayālam speaking persons 198 are in the Trivandrum division, 410 in the Quilon division, 386 in the Kōttayam division and 6 in the Dēvikulam division; whereas, of every 1,000 Tamil speaking persons, the Trivandrum division has 735, the Quilon division 125, the Kōttayam division 43 and the Dēvikulam division 97. Thus nearly 80 per cent. of the Malayālam speaking population are found in the Quilon and Kōttayam divisions and about 74 per cent. of the Tamil speaking population in the Trivandrum division.

The hill tribes speak a crude form of Malayālam or Tamil. In vocabulary and syntax it is not essentially different from the language of the low land, though one from the plains may find it difficult to follow the conversation of the uplanders. Even in the plains and the littoral areas the dialects spoken by all communities cannot be said to be uniform. The backward classes, especially the Pulayās and Parayās, owing to illiteracy and lack of free social intercourse with the higher communities, speak a very unrefined form of Malayālam. Though in many essential

points their speech agrees with that of the higher castes, in pronunciation and syntax it reveals several peculiarities. An average Malayāli can easily follow their conversation. The difficulty is felt by authors who try to copy their speech for depicting low characters. The late Mr. C. V. Rāman Pillai alone, of all who attempted to copy the conversation of the low characters in novels, has achieved any success in that direction. Malayālam scholars show little inclination to study the various dialects, as they are more concerned with literary forms.

Tamil and Malayalam belong to the Dravidian family of languages which constitutes the 'vernacular speech of the great majority of the inhabitants of The Dravidian South India'. The appellation Dravidian family of languages. is a conventional one. It is derived from Dravida, the Sanskrit form of Dramila or Damila. Dravidian is identical with 'Tamilian', the term applied by the early European scholars to signify these languages. Kumarila Batta in the seventh century used the term Andhra-Dravida Bhasha, 'the language of the Andhras and the Dravidas'. The name 'Dravidian' was first used by Dr. Caldwell who included under that term twelve languages, of which Tamil, Malayalam, Telugu, Kanarese. Tulu and Kudagu are cultivated and the remaining six, Toda. Kota, Gond, Ku. Oraon, Rajamalal, are uncultivated. Dr. Caldwell also pointed out that though these are treated as dialects of an original Dravidian language, it would be erroneous to consider them as dialects in the popular sense of the term, viz., as provincial peculiarities or varieties of speech. "Of all idioms", says he, "no two are so nearly related to each other that persons who speak them can be mutually understood. The most nearly related are Tamil and Malayalam; and yet it is only the simplest and most direct sentences in the one language that are intelligible to those who speak only the other". Each of the cultivated

languages has a distinctive literary culture, except perhaps Khōnd, and has a system of written characters peculiar to itself. These reasons go to show that the several Dravidian languages, though sprung from the same origin, are not mere provincial dialects, but distinct, though affiliated, languages."

The main characteristics of the Dravidian form of speech are summarised in the following extract:—

"In the Dravidian languages, all nouns denoting inanimate substances and irrational beings are of the neuter gender. The distinction of male and female appears only in the pronoun of the third person, in adjectives formed by suffixing the pronominal terminations, and in the third person of the verb. In all other cases, the distinction of gender is marked by separate words signifying 'male' and 'female'. Dravidian nouns are inflected, not by means of case terminations, but by means of suffixed post-positions and separable particles. Dravidian neuter nouns are rarely pluralised. Dravidian languages use post-positions instead of prepositions. Dravidian adjectives are incapable declension. It is characteristic of these languages in contra-distinction to Indo-European that, wherever practicable, they use as adjectives the relative participles of verbs. in preference to nouns of quality or adjectives properly so called. A peculiarity of the Dravidian dialects is the existence of two pronouns of the first person plural, one inclusive of the person addressed, the other exclusive. The Dravidian languages have no passive voice, this being expressed by verbs signifying 'to suffer', etc. The Dravidian languages, unlike the Indo-European, prefer the use of continuative participles to conjunctions. The Dravidian verbal system possesses a negative as well as an affirmative voice. It is a marked peculiarity of the Dravidian languages that they make use of relative participial nouns

instead of phrases introduced by relative pronouns. These participles are formed from the various participles of the verb by the addition of a formative suffix. Thus 'the person who came' is in Tamil literally 'the who came'".

Tamil was the earliest cultivated of the Dravidian languages and contains 'the largest portion and the richest variety of indubitably ancient forms'. Tamil and With regard to the origin of the term Malayalam. Tamil, Dr. Caldwell thinks that it is derived from Dravida, the Sanskrit name of this language. He states that it will be much easier to derive Tamil from Dravida than Dravida from Tamil. Prof. Raja Raja Varma maintains just the opposite view that the term 'Tamil' has given birth to its Sanskrit equivalent 'Dravida'. (Tamil = Damila = Dramila = Dravida.*) Malayalam takes a place nearest to Tamil in the list of Dravidian tongues on account of its peculiarly close relationship to the latter. It is spoken in Travancore, Cochin and British Malabar.

Proto-Tamil, from which the modern Dravidian idioms are believed to have evolved, is generally taken

The early Sanskrit writers do not appear to have considered

The origin of the Dravidian land dians. They may either be considered as autochthones or as having immigrated into India from some other country. Caldwell observes:—"The Dravidian languages occupy a position of their own between the languages of the Indo-European family and those of the Turanian or Scythian group—not quite a midway position, but one considerably nearer the latter than the former". He also maintains that, "the Scythian family to which, on the whole, the Dravidian languages may be regarded as most nearly allied is the Finnish or Ugrian, with some

Malayalam as an independent language.

^{*} See Introduction to Kēralapāninīyam,

special affinities, as it appears to the Ostiak branch of that family; and this supposition derives some confirmation from the fact brought to light by the Behistun tablets that the ancient Scythian race by which the greater part of Central Asia was peopled prior to the irruption of the Medo-Persians belonged not to the Turkish or to the Mongolian, but to the Ugrian stock". Against this theory the observations made by Sir George Grierson in his Linguistic Survey of India may be noted. According to him the 'denomination Scythian is a very unhappy one' and 'the attempt to connect them (the Dravidian languages) with the other linguistic families outside India is now generally recognised as a failure, and we must still consider them as an isolated family'. Grierson's view seems to be more acceptable. thinks that the Dravidian languages are derived from the speech of an aboriginal Dravidian population of Southern India.

Some Malayāļam scholars, particularly Kōvuṇṇi Neduṇṇādi, have, on the other hand, tried to prove that Malayāļam has sprung from Sanskrit.* This theory, evidently based on the great number of Sanskrit loan words found in the language, is erroneous. As remarked above, Dr. Caldwell asserted that Malayāļam is a member of the Dravidian family of languages. According to him it is a very ancient offshoot of Tamil. His observation, however, that it might perhaps be regarded rather as a dialect of Tamil than as a distinct member of the Dravidian family is open to doubt. Prof. Rāja Rāja Varma also favoured the theory of the Dravidian origin; the concensus of opinion at present is in favour of this conclusion.

Samskṛtha himagiri gaļithā Drāvida vāṇī kaļindajā milithā Kēraļa bhāshā gangā Viharathu mē hṛthsaraswadāsangā.

Kerala Kaumudi

It is the discovery of old Malayalam works like Ramacharitham that has given rise to the view that

The influence of Tamil over Malayāļam. Malayalam is an offshoot from Tamil. Caldwell opines that 'Ramacharitham, probably the oldest poem in the language, though not, after all, of any very great

antiquity, was composed before the introduction of the Sanskrit alphabet and exhibits substantially the same phase of the language as the Jewish and the Syrian Sasanas. This view cannot be wholly accepted in the light of the information available at present. One fact, however, cannot be overlooked. Tamil, for a very long time, exercised vast influence over Maiayālam and in the early centuries of the Malabar era copper plates and rock inscriptions were written in Sentamil or a dialect closely akin to it. The reason seems to be that Tamil, which developed a vast literature earlier than any of the other Dravidian languages,* was freely used for literary purposes in Malabar. Although the language which prevailed in Kēraļa had acquired strong tendencies of separation during the early centuries of the Christian era, the writers showed a pronounced partiality to Sentamil. Some of the best works of the Sangom period of the Tamil literature were written by natives of Kērala. Silappathikāram, for example, one of the greatest poems in Tamil, ascribed to the Sangom age, was the work of Ilamko Atikal, the younger brother of Senkuttuvan who ruled over Kērala in the second century A. D. The utter disregard shown to Malayalam by the writers had important results. It gave ample opportunities for the language to have an independent development. Malayalam, however, remained dormant for a considerably long period. There exists no authentic record which will throw light on the condition of

^{*} Burnell's view that 'it is certain that the beginning of Tamil literature may be safely put about the ninth century and that there is nothing to show that there was in any way a literature before that time' is incorrect. (See South Indian Palæography, P. 38.).

the language in those early days. But from the copper plate Sāsanās and rock inscriptions, some of which belong to the centuries prior to the commencement of the Malabar era, one may venture to think that Malayālam might have begun its independent course of development several years before the time when those records came into existence.

The view taken by Grierson regarding the age of Malayalam is equally unsustainable. He says:- "There is no reference to Malayalam language in Antiquity of old Sanskrit literature. It was included Malayalam. in the Drāvidabhāsha, i. e., Kumārila Bhatta, and did not in fact branch off from that language till a later period". This remark is not supported with reasons. Drāvidabhāsha does not mean Tamil as is taken for granted by Grierson. It only means the language of the Dravidians, and includes all the languages of that family. According to Grierson it would appear that no other branch of the Dravidian family except Tamil (Drāvida) and Telugu (Andhra) had sprung into existence in Kumārila's time. This indeed is too much to believe; for, we find reference to Kanarese so early as the second century A. D.*

The existence of a language in Kērala different from Sentamil may be inferred from passages in Tamil works of admitted antiquity. Silappathikāram refers to two principal dialects, Sentamil and Kotumtamil, in South India, between Cape Cōmorin and Venkata, and the eastern and western seas. Sentamil was the language spoken in the Chōla and the Pāndya kingdoms while Kotumtamil was the language of the Chēra country. This is corroborated by Tōlkāpiyam which is an earlier work. In that work Sentamil words are grouped under four classes, *Iyarchol* (indigenous words), *Thirichol* (synonyms and homonyms), *Thirichol* (loan words from the languages of the adjoining regions) and *Vatachol* (loan words from Sanskrit). Among

[·] Vide Page 12. A History of Kanarese Literature, by Edward P. Rice.

these the third, *Thisaichol*, alone merits comment. It is explained in Tölkāpiyam as words borrowed by Sentamil from the twelve adjoining regions where Kotumtamil was spoken. The twelve regions are enumerated in the following stanza:—

Then panti Kullam Kulam Karkaravan Pūli Pantiyaru vava than valakku Nantāy chilham malanātu punanātu Senthamil chēre Tamil pannirunātten.

From this it may be seen that Malanad (Kēraļa) was included in the Kotumtamil-speaking regions. Kotumtamil, as applied here, must be understood as a common name for all the dialects belonging to the Dravidian stock excepting Sentamil. The form of Kotumtamil which prevailed in Kerala seems to have finally developed into Malayalam in the same way as the dialects in the other tracts evolved into Kanarese, Telugu, Tulu, etc. the northern branch, was the earliest to show marked difference from the older Dravidian language. Malayalam, on the other hand, retained the family features for a longer time. The language of the Pandya and Chola countries evolved out of the primitive Dravidian idiom and it came to be known by the name Sentamil, i. e., refined Tamil, through a process of reformation. For a long time, Tamil used to be a generic name for all the Dravidian languages. It denoted in particular Sentamil and Malayalam. The Tamil spoken in the Malayalam country became Malayalam as the Tamil of Karinād (black soil) became Karņātakam (Kanarese). Even so late as the ninth century M.E., Malayalam was called In the hemistich 'Samskrthamākina Chengalinīrum nattamilākina pichakamalarum' the word Tamil comprehends Malayalam. This is supported also by such expressions as 'Nambiuār tamil' and 'Tamilkutthu'. This commonness of name, added to the fact that Sentamil was the language of the scholars in Kēraļa, favoured the notion that Malayalam was only a later offshoot of Tamil. Till

about a hundred years back Sentamil was in common use in Kēraļa. It was also the official language of the country. Nevertheless, Malayāļam pursued its own course of development though it was disregarded and neglected by men of learning and the higher classes of people.

In all essential points of grammar, such as syntax system, Malayālam bears a and inflectional resemblance to Tamil. Prof. Rāja Rāja Similarity of Tamil and Malayalam. Varma pointed out that six laws were in operation in the growth of Malayalam, and that these laws reveal the relation between two idioms. The laws are (1) anunāsikāthiprasaram, mommono കാതിലസരം (nasalisation), (2) $thar{a}lavyar{a}dar{e}\acute{s}am$, താലവ്യാരേശം (palatalisation), (3) Swarasamvaranam, സ്വരസംവരണം (vowel contraction), (4) khilopasamgraham, ഖിലോപസംഗ്രമം (preservation of obsolete forms) (5) angabhangam, (syllabic elision). (6) and purushabhēdanirāsam (പരകാഭംനിരാസം) (elesions of personal suffixes).* Some of these need elucida-The law of nasalisation is briefly this; a khara letter preceded by a nasal is converted to the nasal of its class, as for insance, m+ka=m+n=nna, or nga e g., Maram+kal= Maranial (marangal). n+cha=ñ+ña=ñña or nja; pan+cham = Pannam (Panjam). According to the law of palatalisation the letters th, tth, nth, (or, one) if preceded by any of the palatal vowels a, i, e and ai, become ch, cch, nch; afi+nthan = $ari+nch\bar{a}n$; whence by the law of nasalisation $ari+\bar{n}\bar{n}\bar{a}n$ $ari\bar{n}\bar{n}\bar{a}n$. Similarly $ati+t'h\bar{a}n=ati=cc\bar{a}n=atic'h\bar{a}n$. In Līlāthilakam, a treatise on middle Malayalam grammar and rhetoric, ascribed to the fourteenth century A. D., it is specifically stated that even in the old manipravalam forms like vannān, kanni, etc., affected by the laws of nasalisation and palatalisation alone are found instead of vanthān, kanchi. etc., their Tamil cognates. From the fact that the author speaks of forms in the 'old' manipravālam* it may be inferred

[•] For details vide pp. 24-36, Introduction to Kēfalapāninīyam.

that the changes in question must have come into force some centuries before his time. But the evidence of Ramacharitham tells a different tale. The reason for this discrepancy seems to be, as indicated before, that the diction in Rāmacharitham is artificially archaic, bearing few marks of the time in which it was written. The statement in Līlāthilakam that in pāţţu compositions Tamil forms were used in preference to Malayalam ones is thus easy of comprehension. It need hardly be said that Ramacharitham is a pattu in the sense in which that term is used in The author of Lilathilakam states that Līlāthilakam. 'Pāndyabhāshāsārīpyam bāhulyēna pāttil Kēralabhāshāyām bhavathi', i. e., in pāţţu composition written in Kēralabhāsha Tamil forms are seen to preponderate. This point will disprove Dr. Caldwell's contention that Ramacharitham was composed before the introduction of the sanskrit alphabet; for, it is evident from the reference to 'old' manipravalam in Lilathilakam that manipravalam existed in old times side by side with pattus to which category belongs Ramacharitham also. And it is sure that there could be no manibravālam before the introduction of the Sanskrit alphabet. Not even the Fasanas, such as that of Viraraghava and Bhāskafafayi Varma can be safely taken to represent the language of the period when they were executed. For even in later times, when Malayalam had developed a considerable literature, we find documents written in Tamil.

So much about nasalisation and palatalisation. All the remaining laws need not be detailed here. The laws of purushabhēdanirāsam and angabhangam have contributed so much to differentiate the two dialects and may therefore be noted specially. In Tamil as well as in old Malayālam pronominal suffixes are added to verbs to indicate concord between the subject and the predicate, as nān vanthēn and

^{* &#}x27;Chiramthaneshu va adyathaneshu manipravaleshu, etc.'
Vide Lilathilakam p. 8.

nān vann⁵n. But modern Malayālam has shaken off this grammatical superfluity. One cannot be sure whether the addition of personal suffixes to verbs was a regular feature of the original Dravidian. It appears that it was a result of the Sentamil reformation which was later on copied by the old Malayālam writers. The contention of some scholars that the original forms are better represented in Sentamil does not conform to the principles generally accepted regarding the growth of languages.

Under the law of angabhangam comes the question of the difference in the ending of some words as 'ai' in Tamil, and 'a' in Malayalam. In Kanarese and Telugu these words end in 'e' and 'a' respectively. Tam. Thalai; Mal. Thala; Kan. Thale; Telugu. Thala. Opinion is divided as to which of these forms represents the original Dravidian more faithfully. In Kēralapāņinīyam it is stated that 'ai' at the end of bases as well as suffixes is contracted to 'a' in Malayalam. This view presupposes that in the original Dravidian these words ended in 'ai'. This opinion has to be greatly modified in the light of later researches. The fact that Telugu also has the 'a' ending is a striking proof in favour of the Malayalam forms. we take the opposite view, it will be difficult to explain the common ending in 'a' in Telugu and Malavalam which are so far removed from each other. It seems probable that the addition of 'ai' by way of ornamentation to every word which ended in 'a' was a main item of the Sentamil reform. Kanarese followed Tamil and converted 'a' into 'e'. This view derives confirmation in the light of the fact that Sanskrit loans, if they end in 'a', are made to end in 'ai' in Tamil: as Katha, (Sans.)-Kathai (Tamil); Jata (Sans.)-Chetai Tamil: whereas in Malayalam we get Katha, Jata. Another evidence to the same point is that when an 'ai' ending word in Tamil becomes the first member of a compound the 'ai' is elided; as Vāļai+kulai = Vāļakkulai and not vālaikulai. This helps the inference that the words which originally ended

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in 'a' entered into compound relation with other words in very early times, and that these compound-types were preserved intact even after the starting of the reformation. Moreover, Tamil grammarians, like the author of Molinūl, clearly state that the 'a' ending was the original form in the primitive Dravidian and that 'ai' was a later addition. This point further illustrates that Malayālam had separated from the parent stock prior to the time when Sentamil reformation was started.

By applying the laws mentioned above Prof. Raja Rāja Varma proved that any passage in Malayālam might be rendered into Tamil without effecting any radical change either in the diction or syntax and vice versa: all that is necessary is change in the forms of words and inflections. The reason that makes the change necessary is the following. While Malayalam has 53 letters in her alphabet: 16 vowels and 37 consonants, the Dravidian inheritance being enriched by additions from Sanskrit, Tamil has only 28 letters derived from her original family. Moreover, many small changes have crept into the inflectional system and mode of pronunciation in Malayalam. There is also another detail to which attention may be drawn. quote Dr. Caldwell, "the proportion of Sanskrit words adopted by Dravidian languages is least in Tamil, greatest in Malayalam; and modern Malayalam characters seem to have been derived in the main from the grantha, the character in which Sanskrit is written in the Tamil country. In consequence of these things the difference between Malayalam and Tamil, though originally slight, has progressively increased, so that the claims of Malayalam, as it now stands, to be considered, not as a mere dialect of Tamil, but as a sister language, cannot be called in question. Originally, it is true, I consider it to have been not a sister of Tamil, but a daughter. It may best be described as a much altered offshoot". These observations are in the main correct except as regards the conclusion that Malayalam was originally the daughter of Tamil. The more legitimate inference is that starting from the original Tamil both languages had a more or less parallel growth; Malayalam, however, allowing itself to be influenced by Tamil forms and ideas as a consequence of the continuous and intimate intercourse.

According to Prof. Raja Raja Varma the develop-The periods of ment of the language falls within three development. periods.

- i. The period of Karimtamil. up to 500 M. E.
- ii. The period of Mediæval Malayāļam.

500-800 M. E.

iii. The period of Modern Malayalam.

800 M. E. to the present day.

It is needless to point out that in this division the development of the language after the commencement of the Malabar era alone is taken into consideration. A better division based on chronology may be suggested, viz., (1) Ancient Malayāļam, till the ninth century A. D., (2) Old Malayāļam, till the fourteenth century, (3) Mediæval Malayāļam, up to the seventeenth century and (4) Modern Malayāļam, down to the present day.

In the early centuries of the Christian era, Sentamil

was patronised to a very high degree in Kēraļa. Scholars like Kapilar and Chāthanār were the court bards and Tamil was the court language. Centuries rolled on like that before the Koṭumtamil of Kēraļa (Malayālam) could assert her independence. Even then Tamil did not willingly give up her guardianship. The earliest Malayālam literature, in the form of inscriptions, shows preponderating influence of Tamil. This sway prevailed late into the mediæval period even when the language fell under the spell of Sanskrit literature. At one period it seemed that the influence of both these

lunguages was equal, but the later development shows that

Tamil gradually waned, its place having been taken by Sanskrit. It is impossible to fix the earliest period in which Sanskrit began to exercise its influence in the south. But it is sure that the Keraliyas came to be closely acquainted with Sanskrit with the advent of the Nampūthiris from the north. which must have taken place some centuries before the commencement of the Christian era. At first the Aryan settlers did not take kindly to the Vernacular. But in course of time the intercourse with the natives became an unavoidable necessity for which the study of the language was indispensable. They first spoke a mixed language, freely making use of Sanskrit words. It is difficult to estimate the precise extent to which Malayalam is indebted to Sanskrit. Sanskrit words were freely introduced and the mythology and the pantheon of the Aryans took the hearts of the Malayalis. It may be noted that Sanskrit words now current in the language fall under two broad heads, the thathsama and the thathbhava. The thathsama words are those that are borrowed from Sanskrit without any change in the radical portion, as mukham, charanam. vrksham, etc. The thathbhavās are those adopted to Dravidic sounds * as akkam (aksham), chakki (Sakthi), pakki (pakshi), arakkan (Rākshasa). No definite theory can be advanced as to the respective periods of the borrowing of the thathsama and the thathbhava types. At present, side by side with the thathbhavās, in most cases, the thathsamās are also found to exist. The thathsamās retain their original meaning without any alteration, whereas the thathbhavās have acquired a special sense in certain cases. In the examples given above, akkam means a figure denoting a number, whereas aksham means axis, axle or pivot. Pakki means a winged insect and pakshi a bird.

The influence of Sanskrit grew so great that in course of time the Dravidian features of Malayalam were completely submerged. Many old words lost currency.

^{*} See foot-note supra, p. 461.

Likewise many new words denoting new ideas from mytho-

The Mediaeval period and the growth of Manipravalam. logy, religion, ethics, law, astronomy and medicine came into currency. As in language, the influence of Sanskrit was felt in literary forms and models. In the early

days, the Nampūthiri Brahmans wrote exclusively in Sanskrit, their sacred tongue. This led to the growth in Kērala of an extensive literature in that language. Some of the Sanskrit writers of Kērala are brilliant luminaries in the galaxy of the learned. It is not by their eminence in Sanskrit alone that the Namputhiris have laid the Malayalis under a permanent debt of gratitude. Gradually they devoted themselves to the cultivation of Malayalam and laid the foundation of what is known as the manipra $v\bar{a}la$ which by its variety and scope as well as by its artistic elegance and literary finish has become one of the best portions of Malayalam literature. The growth of manipravāla marks an important stage in the history of the language. The movement had its origin in a free combination of Sanskrit and Malayālam for literary purposes. It is defined as Bhāshā Samskrtha Yōgah, combination of Bhāsha (Malayalam) and Sanskrit. Strictly speaking, the term manipravāla is used only to denote literary compositions in which Sanskrit words are freely intermingled with indigenous words. For this reason, the copper plate grants of Vīrarāghava and Bhāskararavi Varma are not called manipravala compositions though they contain Sanskrit words. Again, in manipravāla Sanskrit words should be used in their original form. This rule excludes all those compositions in which thathbhava Sanskrit words are used with Malayalam words. It is therefore that Ramacharitham*, Kannassa Ramayanam and similar works are not considered manipravāla compositions.

^{*} These, as indicated before, belong to the category called $P\bar{a}ttu$ composition. $P\bar{a}ttu$ is defined as a poetical composition in which words written in Dravidian letters alone are used and which is embellished by $\bar{c}thuka$ and $\bar{m}ona$ rhymes.

The best authority on the use of the manipravāļa is Līlāthilakam referred to in an earlier portion of this chapter. It is a mine of valuable information regarding the mediæval period of Malayāļam. The earliest works of manipravāļa literature reveal the fact that no particular system of rules was observed in the blending of the two languages. Sanskrit suffixes were freely added to Malayāļam bases, as, Pālavum pinniţēthāh, Koṭṭatthēnānābhirappaih, etc. This practice was later on found incongenial to the genius of Malayāļam and was therefore discontinued. The Uṇṇunīlisandēśam, ascribed to the fourteenth century is the best representative of early manipravāļa compositions. In the works of Punam Nampūthiri and those of Eluthachan it attained its high-water mark. The later poets more or less followed in their footsteps.

There is a notion prevalent among some of the older scholars that it was Thunchathu Rāmānujan Eluthac'han who settled the form of standard Eluthachan's manipravalam. It is true that Eluthachan contribution to by his monumental works helped to popumanipravāla. larise the standard manipravāla language, giving it a finishing touch with his phenomenal genius. On a historical survey it will, however, be found that he was only closely following in the footsteps of his predecessors in the matter of idiom and mode of expression. important changes which are attributed to that great poet were the result of gradual evolution. Long before Eluthac'han, the authors of the champvs as well as Cheruśśēri Nampūthiri used a language not in any way cardinally different from his. But, for a long time, there existed a difference between manipravāla and pattu, manipravāla confining almost to Sanskrit metres and pattu to Dravidian metres. In the works of Cheruśścii and Kannaśśa Panicker. two of the eminent predecessors of Eluthachan, a regular attempt was made at an amalgamation of the two forms of composition. Eluthachan following in their track composed the $p\bar{a}ttu$ composition in $maniprav\bar{a}la$ style and finally settled the form of language which has been adopted by future generations with but few modifications. The practice of adding Sanskrit suffixes to Malayālam bases and sanskritising indigenous words was finally discarded. It became a rule that, as far as possible, Sanskrit words should not be compounded with Malayālam words. So far as Sanskrit loans are concerned, in matters relating to Sandhi, Samāsa etc., the rules of Sanskrit grammar came to be followed. The further history of the development of modern Malayālam need not detain us here, as it will find a more suitable place in the section on Literature.

The influence exerted by foreign languages on Malayalam merits mention. From the earliest days Kērala had commercial relations Influence of various peoples and the Malayalis never foreign languages. hesitated to borrow words and forms of Thus hundreds of words belonging to the Arabian, the Persian, the Portuguese, the Dutch, the Hindustani and the Urdu are now current in the language. Many words which are to be found in old documents and ancient literary works have become obsolete. Reference may be made in this connection to Unnunilisandesam in which are found several verses adopting the conversation of foreign merchants in Quilon and other market places in their own languages. Chinese traders crowded in Quilon in those days and some words from their language have naturally found a place in Malayalam. But no definite conclusion can be reached as to the extent of these foreign influences until a thorough study of loan words in Malayālam is undertaken.

It is now over a century and a half since the English language and literature began to exercise their beneficial

influence. It is sometimes said that Malayalam prose had its origin in very recent times as a consequence of the acquaintance of the Malayalis with English Influence of This view proceeds from an in-English. correct appreciation of facts. It is true that the development of prose literature after the commencement of the British connection has been marvellous. But there was prose, a considerable body of it, already. There were from very early times two distinct types of prose composition, the one used by the Chākuārs in narrating puranic stories in temples, marked by sanskritic influence, and the other used for keeping accounts and recording historical facts. account of the early development of prose will be given in the section on Literature. Here, it may be sufficient to note that the letters of Rani Gouri Parvathi Bavi preserved in the archives of the Huzur Central Vernacular Records Office may be taken to represent the earliest type of Malayalam prose written under English influence. A great number of English words has found its way into popular use. Most of these are the names of things or institutions newly introduced from the west. Many expressions relating to Government, law, politics and related subjects have been freely borrowed from English. Some of those words have undergone considerable change in popular use, as hearing iranki, endorsement indās, Court kōtathi, etc. Each of the Departments of the Government has popularised several English terms relating to the particular branch of knowledge or activity in which it is interested.

Malayalam, in spite of its wonderful growth in recent years, cannot yet boast of an adequately rich scientific branch. One difficulty in this direction is the lack of scientific terms in the language. There is a strong section among scholars who favour the free borrowing of the necessary terms from English without effecting any cardinal changes. But

there is another party who advocate that instead of English terms corresponding Sanskrit equivalents should be coined, since English terms are not congenial to the genius of Malayalam. This was one of the main topics of discussion in the session of the Samastha-Kērala-Sāhitya Parishad held at Trivandrum during the Christmas of 1936. The Press is making valuable contribution in this direction. Numerous technical expressions from English relating to various subjects such as law, politics, economics, ethnology, anthropology, astronomy, are daily translated into Malayalam by the pressmen and though scholars sometimes object to such unauthorised rendering, they very soon gain currency among the people. An up-to-date lexicon, which still remains a desideratum in spite of so much talk, will have to include hundreds of words and phrases popularised by the Press. This is an indirect advantage derived from English.

So far with regard to the development of the literary dialect of the language. In matters relating to the spoken form the observations of Grierson The spoken apply to Malayalam as well as to the other dialect. Dravidian languages. He remarks:- "The best known Dravidian languages are Tamil, Malavalam. Kanarese and Telugu. They have all for a long time been used as literary languages. Their literature is, in the case of all of them, written in a language which differs more or less from every-day speech, and is usually recognised as a separate dialect. The difference between the two forms of speech is often considerable and it would, for instance, be a vain attempt to make an uneducated Tamil read and understand the literature of his native tongue. The relation between the literary and colloquial forms of the languages in question has not, however, been fully explained, and the question cannot be taken up in this place where we are only concerned with the spoken form, the more so because none of the languages in question properly fall within the scope of this survey. We can only note the fact that the literary dialects usually represent a stage of development older than the colloquial forms. On the other hand, they are apparently based on different dialects and older forms are often preserved in the dialects spoken at the present day".* Dr. Caldwell pointed out this feature of the Dravidian languages many years ago. "It is a remarkable peculiarity of the Indian languages that, as soon as they begin to be cultivated, the literary style evinces a tendency to become a literary dialect distinct from the dialect of common life, with a grammar and vocabulary of its town. This is equally characteristic of the speech of the Aryans of the north and of that of the Dravidians of the south".†

The colloquial speech not only differs considerably from the written dialect, but also shows variations from place to place and class to class. The points of difference between the two forms may be briefly considered here.

- i. Many words and forms used in everyday speech are not generally admitted to literature.
- ii. Many words popularly used in writing are seldom used in the spoken dialect.
- iii. In the spoken dialect much attention is not paid to the arrangement of words and syntax. If the ordinary conversation of an average Malayāli is taken down verbatim and examined, this fact will be clearly understood. Even in platform speaking a book-style is considered pedantic. Long sentences and complex constructions are generally avoided in conversation. Among the educated there is a tendency to impress English words. Broken sentences form a characteristic feature of the vulgar.
- iv. In the case of certain words, a refined form is used in writing and an unrefined form in conversation.

[•] Grierson's Linguistic Survey of India, Vol. IV, p. 282. *These observations may apply to all languages.

[†] For details see Caldwell's Comparative Grammar, pp. 78-81.

In written as well as in spoken dialects considerable difference exists between the south and north of Kēraļa. In Travancore the mixture of Sanskrit words is proportionately larger than in Cochin and British Malabar. Writers of the north adhere more rigidly to the use of genuine Malayalam expressions, while in Travancore a systematic borrowing of Sanskrit words is in greater vogue. Regarding class and local differences found in the spoken language the observations of Mr. Subrahmonia Iyer, a former Census Commissioner, may be quoted here. "In Travancore there are minor differences in vocabulary of the people in different parts, but they are neither sufficiently material nor numerous to constitute a separate dialect. There is no difficulty for a person speaking Malayalam to make himself understood in any part of the State. The Malayalam spoken by the Pulayas is different from that spoken by other Malayalam-speaking people and these differences will often enable one to recognise without sight the castes to which the speakers belong. But what caste really and actively does in this regard is only to crystallise and preserve such differences as may be original or such as may have interpolated themselves as the bye-effects of exclusive social lives and dissimilar working conditions. However, with the spread of education and the circulation of vernacular periodicals, these differences are tending to get obliterated". Much has been accomplished in this direction since Mr. Subrahmonia Iver wrote.

Reference may here be made to the so-called āchāra-bhāsha or language of courtesy, used by people of the lower The Āchārabhāsha. classes to those of the higher and by all persons in addressing the members of the royal family.

The official language as well the medium for the secondary and collegiate education in Travancore is English.

English. in the State. Even after years of continuous effort, only a small percentage of the population in the State has learnt the language. Government correspondence in almost all departments is carried on in English and judgments of courts are written invariably in the same language. A large volume of official reports and other Government publications are in English. English is the language of the Legislature and of Legislation. There are in Travancore many notable scholars who can write and speak English with commendable mastery. Standard books in several subjects have been written in that language.

The Hindi propaganda now carried on in Travancore also deserves notice. 'Of late a movement has been started in Travancore to popularise the study of Hindi. It is an offshoot of the nationalist movement in British India to make this language the lingua franca. The claims of Hindi as a national tongue are generally recognised. It is now admitted by Government as a subject of study in schools.

The oldest alphabet known to have been current in South India, including the Malabar coast, was Vatteluthu, otherwise called Nānammēnam. "The earlithe Malayālam est known records written in this alphabet characters. discovered hitherto", says the late Mr. Gopinatha Rao, "are those of the early Pandya King, Jatilavarman Parantaka I, who reigned in the last quarter of the 8th century A. D." But there is evidence to infer that the script was in existence for some centuries earlier.

Dr. Burnell considers it the original Tamil alphabet and calls it 'the Pandya character.' The same scholar traces its origin to the Phoenician and Arabic characters of Europe and states that it will be best to consider the Asoka alphabet and the Vatte uthu as independent. * In his opinion the Vatteluthu was gradually supplanted by the modern Tamil characters after the conquest of Madura by the Cholas in the 9th century. It appears to have entirely gone out of use in the Tamil country by the 15th century. Dr. Bühler in his Indian Palæography states that 'the Vatte uthu may be described as a cursive script, which bears the same relation to Tamil as the modern alphabets of the clerk and merchant to their originals, eg:- the Mesodi of the Mahrattas to the Balbodh and the lakari of the Dogras to the Sarada'. Gopinatha Rao, in his learned introduction to Vatte!uthu inscriptions in the Travancore Archæological Series, No. XVI, criticises these views and proves 'that the prototype of the Vatteluthu alphabet is the Brāhmic variety of the Asōka script'. He says further that 'it had, like the other alphabets, its own evolution which differed somewhat from the course of evolution of the Tamil characters'. The development of the South Indian characters from the Aśōka script is clearly pointed out by the same scholar. He has established that the Tamil grantha characters are directly derived from the Brāhmic letters and that the Vatte!uthu bears close resemblance to the grantha alphabet.

The Vatte uthu and its later development Kōle uthu or Malayānma were in use in Travancore, particularly in official documents, till the time of Mahārāja Uthram Thirunā! Mārthānda Varma (1022—1036 M.E.). In course of time the difference between the various letters, such as p, v, y, etc., was almost lost and therefore the reading of Vatte uthu writing required considerable experience. There are four or five varieties of Vatte uthu writing now available for comparison each differing from the others only in unessential particulars.

[•] See pages 38-42, Burnell's South Indian Palæography.

The early alphabet being adapted to the Dravidian sounds *, was deficient in many letters representing Sanskrit sounds. So, when Malayalam began to borrow words from Sanskrit, the alphabet was found insufficient. In the earliest stages Sanskrit words were transformed to suit the Dravidic sounds. But it was soon felt that in the process of change the words lost much of their original dignity and grace as well as their force. The process of mutilating Sanskrit words never gained the approbation of the Nampūthiri Brahmans. Consequently, Sanskrit words began to be borrowed in their original form which necessitated the invention or borrowing of new letters. The want was supplied by taking the necessary letters from the grantha characters, originally used in South India for writing Sanskrit. The borrowing seems to have been a gradual process, for, in the Vīraraghava copper plate grantha characters are used side by side with other scripts. The opening words in most of the old inscriptions 'swasthi śrī' are found written in the grantha characters and the remaining portion in other scripts. Hence the inference arises that it was the individual choice of writers which was responsible for the adoption of characters from the grantha script. At the time when Unnunilisandesam was written Malayalam must have acquired all the 53 letters that it possesses now, sixteen vowels and thirty-seven

^{*} Dravidian sounds:—Vide Līlāthilakam. 'Dramida samghātō Dramida mātṛkā, Varga madhyatrayōshmabhih ṛl varna visarjanīyaischa rahitā dīrghēnēva hraswabhūtēnāpy ekārēna okārēna cha sahitā'. Dravidic alphabet means the original Dravidic letters, i. e., all the Sanskrit letters excepting the middle triad of (the five) classes, the ushma letters, ṛ, ļ and the Visarga, together with the short as well as the long e, and o. That is to say, so far as vowels are concerned, Dravidian language is deficient in 'ṛ' and 'ṭ'. But short 'e' and short 'o' are found in the Dravidian while they are absent in Sanskrit. In the case of consonants, the Dravidian has only the first and the last letters of the five classes (Vargās) (i. e., k, ħ, ch, ħ, ṭ, p, m,) as also the semi-vowels ŷ, ṛ, l, v, ś, sh, s, h are absent in the Dravidian though ½ (v) is peculiar to it.

consonants, for, in that work Sanskrit words and forms are profusely used in their original form. So long as there is no evidence to show that the author of that work made use of the Sanskrit characters to write Sanskrit words, the only alternative is to suppose that he adopted the grantha alphabet.

It is in the light of this evidence that the view of Dr. Burnell has to be examined. Says he: 'The application of Arva eluthu (the Malayalam name for the grantha script) to the vernacular Malayalam was the work of a low-caste man who goes under the name of Thunchathu Eluthachan; a native of Trikkandiyūr, in the present district of Malabar. He lived in the seventh century but his real name is forgotten; Thunchathu being his 'house' or family name, and Eluthac'han (school master) indicating his caste. It is probable that there was a scanty vernacular literature before his time, but it is entirely owing to him that the Malayalam literature is of the extent it is. He translated the Sanskrit Bhagavatha and several similar mythologic religious poems, leaving, however, a large infusion of Sanskrit, and writing his composition in the Arya character. His translations are often erroneous and beyond adopting the Vatteluthu signs for r, l, l (5, c) he did nothing whatever to systematise the orthography which till lately was defective or to supply signs for letters (eg., ŭ) which are wanting in most of the other Dravidian languages.' *

These remarks are the offspring of ignorance. It cannot be said that Eluthachan was the first to apply the *Īrya eluthu* or that his translations are erroneous. Original documents belonging to the 6th and the 7th centuries M. E., written in the modern Malayālam script adopted from the *igrantha* alphabet are available in the archives of the Central Vernacular Records Office, Trivandrum. The inscription of Adithya Varma belonging to the 6th century M. E., found on the Krishna shrine inside the Ślī Padmarābha temple

^{*} See Burnell's South Indian Palæography, Page 35.

is also in the \bar{Arya} script. The above facts prove the hollowness of Burnell's theory. \bar{A} ditya Varma's inscription is very valuable, for, from it the gradual process of the change from the grantha to the modern Malayālam characters may be easily understood. What Eluthac'han did was to make use of the \bar{Arya} eluthu, thereby popularising it. Before his time the \bar{Arya} eluthu existed side by side with $K\bar{c}$ leluthu or Malayānma and the Tamil script. In fine, it may be stated that of all the Indian languages, the classical Sanskrit not excluded, the Malayālam alphabet affords the greatest facility of expressing, by appropriate marks, the largest variety of sounds.

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CHAPTER VIII

MALAYĀĻAM LITERATURE

The literature of Travancore and of Kērala bears the distinctive marks of a complex culture which taking its roots in ancient Dravidian civilisation Introduction. assimilated the best part of Aryan thought which spread over the whole of India and grew from more to more incorporating in itself the accretions of time. has drawn within it the essence of western education and western habits of thought by wise selection and careful imitation. But the urge is still national and the appeal continues to be oriental. The capacity for assimilation is one of its chief features and wealth and variety its prominent characteristics. The literary traditions of the State are as great and as continuous as its political history and the long pedigree of the ruling family. Ilamko Aţikal set the fashion of Tamil epic poetry in Silappathikāram more than one thousand seven hundred years ago. Kulaśēkhara Alwar enriched the Tamil language by his Thiruvaymoli and embellished Sanskrit literature by the creations of his genius. So did Kavivarma Kulasēkhara in the fourteenth century. Ramacharitham, the earliest specimen of Malayalam poetry which has come down to us, was the work of one of the old Mahāfājās of Travancore. The works of royal authors may be selected to represent every stage in the growth of the literature during all this long period. Their example often settled the fashion and their patronage gave a stimulus to the expansion of the language of the country.

The earliest literary works produced in Kēraļa were in Tamil and in Sanskrit. The development of Malayālam literature was later in point of time, the oldest work which has come down to us being one assigned to the thirteenth

century A. D. This fact, however, in no way detracts from its importance or comprehensiveness; for, antiquity is not the main standard in evaluating the greatness of a language. Some of the great European literatures cannot boast of any work more ancient than the oldest Malayalam work. Modern English, for example, dates only from the fourteenth century. Before the time of Chaucer, English literature had little to boast of. Nor is the case different as regards some of the important Indian languages. The correct test is the wealth and variety of literary production. Poetry was in the earlier stages more important than prose. are treasured the best thoughts of the previous generations. Malayalam has a poetical literature which compares favourably with any other in India. Only Tamil among the Dravidian languages, and Bengāli among the north Indian languages can boast of a greater range and wider variety.

Malayalam literature is a harmonious blending of Dravidian and Aryan elements. The oldest compositions, the Pāttīs, may be traced to Dravidian Dravidian and sources. Even in later times, down to the Aryan elements. present day, when the influence of Sanskrit became predominant, the reassertion of the native element is obvious from the partiality shown by great poets like Eluthachan and Kunchan Nambiyar to indigenous forms of composition. To appreciate fully the various phases in the development of Malayalam from early times, it is necessary to understand the significance of these two apparently conflicting elements, which, at times, losing their individual features, imperceptibly merge into one, while at other times, preserve intact their distinct characteristics almost undefiled.

Sanskrit literature, which, from very early times, contributed so much to the development of the Malayalam language by enriching its vocabulary, did liberal service to its literature by supplying

forms and models of composition. Sanskrit has given to Malayalam its own genius, its vocabulary, its poetical conventions, its prosody, its rules of rhetoric in very large measure. Sanskrit literary types, such as, the Purana, the Ithihāsa, the Mahākāvya, the Khandakāvya, the Champu, the Nātaka and the Sandēśakāvya, have served as models to Malayalam poets. Many of the popular works in each of these types in Sanskrit have been translated. Some of these renderings have become classical. A large portion of the poetical literature in the language is written in Sanskrit metres and poetic conventions have been freely borrowed. Thus, the sun is the lord of the lotus and the moon the lord of the night-lily; the Chakōra bird drinks moonlight; the Chakravāka separates itself from its mate at nightfall. Flowers are the arrows of Cupid and his chariot is the gentle breeze. These and many other conventions are met with in literature of which, like the writers of the classical period in Sanskrit. the older Malayalam poets seem never to weary. A knowledge of these conventions is essential for the correct appreciation or understanding of the literary works in Malayalam.

Malayalam has drawn largely on Hindu mythology, religion and philosophy in the development of its literature.

Mythology and philosophy.

The Hindu myth like a parent's blood passed into all the veins of literature, of which it is still one of the most invigo-

rating currents. Likewise, all the different systems of the religious and philosophical thought of the Aryans have lent their colour, in no small measure, to the literature of Kērala. The more important works, whether Champu, Kilippāṭṭu, Thullal or Kathakali, are mostly based on Purānic stories. The originality of the poets consisted mostly in the treatment of the subject and in the modifications introduced into the original stories.

Recently, however, a change is manifesting itself.

The spread of English education and the consequent change

The new out-look. angle of vision. Social life and brother-hood of man have come to be regarded as the more suitable themes for poetry and the several phases of international thought are to some extent reflected in the works of the modern Malayāļam poets.

The variety and wealth of Malayalam literature is evidenced by the fact that under each of the main species of literary productions there are several Variety of subdivisions having well-recognised techliterary forms. nical features. The same story may be found treated under various categories of poetical composition. The story of Nala and Damayanthi, for example, has afforded theme for many types of poetry. Malamannalathu Nampūthiri has composed a champu prabandha on the same story. Kunchan Nambiyār himself has written a thullal as well as a kilippāttu on this subject. Uņņāyi Vāriar has made it the theme for his famous āttakkatha, Nalacharitham. Nevertheless, each one of these works is distinctively original in form and design and is widely read and appreciated throughout Kērala. Such a variety of treatment is seldom seen in other languages, not even in Sanskrit to the same extent. Under epics there are translations and adaptations like Bhāratham, Bhāgavatham, and Kāmāyanam besides quasi-original works like Krishnagātha and Girijākalyāņam which depend on Sanskrit works merely for general theme. Minor poetical works include Khandakāvyās of varying length, Kīrthanās, Sthāthrās and several other varieties. Otta ślokās or single stanzas may be compared to the sonnet.

Malayalam is sometimes said to be deficient in scientific and technical literature. Under this head are included scientific treatises pertaining to subjects like language, literature, natural

science, sociology and politics as well as history. Works relating to language, such as lexicons and grammar and works on literary criticism, are somewhat rare in Malayalam. Dr. Gundert is the only lexicographer worth the name, though works like Śabdathāravali by Śrīkanţēśwaram Padmanābha Pillai are also popular. The only grammarian and rhetorician who deserves mention is Prof. Ŕāja Ŕāja Varma generally known as the Kērala Pāṇini. The case of natural science and history is worse. Though the paucity of standard works on technical subjects is to be regretted, there are numerous publi-They do not, however, cations of an inferior order. command any large sale. The limited nature of the demand is one important reason for the slow growth of this branch of literature. Higher education in technical and scientific branches as well as in subjects like history, economics and politics is imparted in English, and consequently there is no academical call for such learned treatises in Malayālam. Educated Malayālis have not as yet turned their attention, to any appreciable extent, to the cultivation of their mother-tongue in this direction. There is also considerable difference of opinion as to whether higher education in technical and scientific subjects should be pursued in the mother-tongue or in English.

In imaginative power and creative faculty as well as in the wealth of moral sense and philosophy of life, the Malayālam poets stand on a par with the great poets of the world. The literatures that influenced the growth of Malayālam in olden days were Sanskrit and Tamil as has been already indicated. In modern times English and, to some extent, Bengāli have contributed to its development. One noteworthy fact about the poets and other literary men of Kēraļa is that they have not hesitated to enrich the language by adaptations from foreign sources.

The earliest type of literature in Malayalam now preserved is a body of metrical composition popularly known as palaya pāttukal, meaning old songs. History. songs transmitted from by-gone times Palayapattukal. through human memory form a valuable literary inheritance. Their present form, of course is relatively recent. Many must have been the additions and alterations which have been made in their text in the course of their progress through centuries. There are several varieties of them, viz., Brāhmaņipþāttu, Bhadrakālipþāttu, Sasthappattu, Krshippattu, Nanthunippattu, Onappattu, Yathrakalippāttu, Villadichānpāttu, Thiruvāthirappāttu, etc. songs are named according to the subject-matter, the instrument to which they are sung in accompaniment, the occasion on which they are recited, the person who is described as singing them, or the dance to accompany which they are sung. At present, though these songs are sung on occasions of ceremonial functions, they receive little attention and obtain little patronage. They, however, survive as a remnant of the earliest phase of Malavalam Some of the later literary developments are distinctly traceable to these songs.

Next to these songs in chronological sequence come Chākyār Kūthu and its later outgrowth, viz., Kūtiyāttam, which form the earliest type of indigenous Kūthu and histrionic art. Kūt'hu may be described Kūţiyāţţam. as a sort of monodrama, a presentation of Puranic stories. The Chakyar himself, in the course of narration, acts the part of all the characters, impressing the audience with suitable gestures. Kūtivāttam is a performance in which the Chakyar acts the part of the male characters, and the Nangyar, his wife, that of the female characters. It commences with a prologue by the Nambiyar, who also makes the necessary stage arrangements and beats the milavu, a kind of drum. It may be noted in particular that the stage of the Chakyar was invariably a temple.

These religio-dramatic performances which first came into existence in very early days continued to be the main entertainment of the Malayalis till recent Their growth. (Kulasskha'a and times. They helped the development of Tholan.) the indigenous dramatic literature. krit models also exercised considerable influence. sēkhara Aļwār, who lived about the ninth century A. D. was a great dramatist. Thapathīsamvaraņam and Subhadrādhanamiayam have won for him a great name in Sanskrit literature. His works have supplied the Chakyars with a literature which proved to be of immense help. Tholan, his court-bard, is believed to have written Attaprakaram, a guide-book of histrionic art, in which is described in every detail the manner of acting a dramatic piece. Kramadīpika, another work by the same author, is a sort of supplement or sequel to Attaprakaram. It contains detailed directions for the actors. The known works of Tholan show that, during his days, Malayalam had more or less divested itself of the influence of Tamil and had begun its independent course of development. Borrowing from Sanskrit was common.

The performance of Kithu and Kitiyātṭam was extremely popular in the old days. Their main object was to present the purānic stories and, through that means, appeal to the religious sense. They exerted a potent influence on society by the exposition of the purānic ideals. The sarcasms and the scalding practical jokes of the Chākyār were greatly appreciated. The popularity of the performance encouraged some of the great poets to compose champu prabandhās which were recited, explained and commented on by the Chākyār. This gave a stimulus to the growth of Malayālam prose,

The earliest work known to the student of Malayalam is the Payyannur Pattola. Dr. Gundert respects it for its antiquity and lavishes much praise upon rayyannur Pattola and Ramacha itham. it for literary merit. P. Govinda Pillai, the author of Malavala-Bhashacharithram, also assigns to it a date earlier than Kamacharitham, a long metrical composition which belongs to the close of the thirteenth century or the beginning of the fourteenth. Ramacharitham is believed to have been composed by one of the old kings of Travancore. The name of the poet is mentioned in the colophon as Śrī Rāma. The subjectmatter is the war between Rama and Ravana. As pointed out in the previous chapter the work shows the preponderating influence of Tamil. The poet soars to considerable heights in original conception. The execution is elegant and fascinating. To the student of Old Malayalam, Kamacharitham is of inestimable value.

There are other $P\bar{a}tt\bar{t}s$ also, some of them posterior to Ramacharitham. Ulakutaya-peiumāt Pāttu, Anchu Thampurān Pāttu and several others belong to this type of composition. No adequate attempt has yet been made to collect and publish the full text of these different old songs. *

There are also certain prose works assigned to this period. They are in what is called Nambiyār Tamil, which, as pointed out already, means Old Malayālam. These early prose compositions are marked by the great influence of Sanskrit and Tamil. Besides pure literary works, several treatises relating to medicine, tastronomy and philosophy are ascribed to this period. But it is difficult to fix their precise dates with any degree of accuracy.

^{*} Mr. C. P. Govinda Pillai's one of the available collections.

[†] Yogamrtham, a treatise on medicine, is ascribed to this period.

An important stage in the development of Malayalam literature is represented by Kāmakathabbāttu. The author of the poem was Ayyippillai Asan of Řámakathappájiu. Avvāduthura near Kovalam. He is known to have written two other poems also, viz., Pathala-Kamayanam and Sathamukha-Kāmāyanam. He was, at first, a rude and unlettered peasant; so goes the story. One day, while he was working in the fields, the idea occurred to him that he should go and worship in the temple of Śrī Padmanabha. He set out immediately to Trivandrum. On his return after worship in the temple an old man presented him with a ripe plantain. On eating it, he became inspired and began to sing in rapture. Nothing further is known about Ayyippillai Āśān. He was a poet of considerable originality and refinement of taste. There is a very large proportion of Tamil words in his works. The metres employed are of the Tamil pattern.

As to the time of Kāmakuthappātļu various theories have been put forward. One view assigns it to the fifth century M. E. The language of the poem gives little indication as to the probable period of its composition. Its diction is artificial. From a reference to Kannaśśa Panikkar in the prologue to the poem it is maintained by some scholars that the work should be assigned to a period later than that of Kannaśśan. But the stanza in which Kannaśśa Panikkar is referred to may well be an interpolation. A complete edition of the poem remains yet a desideratum. Portions of the first and second cantos were published by Rao Sahib Mahākavi Ullūr S. Paramēśwara Aiyar some years ago.

There are two works of outstanding literary and Lilathilakam. historical value which throw considerable light on early middle Malayāļam. They are Līlāthilakam and Unnunīlisandēšam. Their dates and

authorship are subjects of keen controversy. But it is generally admitted that they both belong to the fourteenth century. Though dealing with Malayālam grammar, Līlāthilakam is written in Sanskrit and contains quotations from many old works now lost. It is divided into eight chapters called silpas. In the first silpa the term manipravāla is defined and illustrated. In the second and the third, grammatical rules relating to the manipravāla language are dealt with. The merits and defects of poetical composition are explained in the fourth and the fifth silpas respectively. The three last ones are devoted to the treatment of sabdālankāra, arthālankāra and rasa. The author seems to have possessed deep erudition in Sanskrit and in the South Indian languages. The book is of great value to the student of mediæval Malayālam.

Unnunilisandēšam is the earliest Sandēšakāvya in the language. Since the messenger is directed to pay his respects to Ravi Varma, the great ruler of Unnunīlisandēšam. Quilon, it may be inferred that the poem was composed in the early part of the fourteenth century A. D., for, Kavi Varma Samgiāmadhīra, the emperor of South India, is known to have reigned in Quilon during the first quarter of that century. Some scholars argue from internal evidence that its author was Manikanthan, king of Vempalinād (Vaṭakkumkūr). Mr. S. Paramēśwara Aiyar is of the opinion that it was composed by a junior member of that royal house, himself the sender of the message. Unnunīli is described as, Piņāram manikantha ventala mahibālaika chudāmanh, an ornament to king Manikantha of Vempalinad, who is the crest-jewel of all monarchs. From this it is inferred by some scholars that Unnunili was the daughter of Manikantha. Mr. Attur Krishna Pisharoti holds that the poem was composed at the request of the author's wife, who, according to him, was the maid in attendance on the heroine.

Written as it is in imitation of Kalidasa's Meghadūtha, Unnunīlisandēšam reveals some striking differences from other Sandēśakāvyās. A metrical Its difference preface explains the circumstances under from Meghadutha. which it was written. The very conception of Kalidasa is based on fancy and imagination. But in Unnunīlisandēśam, though the germ of the story, viz., the incident of the Yakshi kidnapping the lover of Unnunili, is a creation of fancy, many facts and circumstances mentioned in the poem rest on solid facts of real life and centre round living persons. In this poem a human being, a royal personage to boot, is made to play the role of the messenger, while Kalidasa chooses an inanimate agent, a rain-cloud. In the Śukasandēśa it is a bird. Kāļidāsa's work, though eminently true to life, does not allude to the affairs then current. But in Unnunilisandesam there is a substantially correct description of mighty kings, great nobles, fair ladies, famous temples and other places of interest from Trivandrum in the south to Kaduthuruthi in the north, which was at that time the seat of the Vatakkumkur ruling family. The references throw light on the political and economic conditions of the time.

The importance of the poem is three-fold. It is one of the most exquisite works in Malayāļam and may well be compared in rank with Kāļidāsa's Mēghadūta in certain respects. It is highly valuable as a literary document which throws light on the dark pages of the history of Travancore during the fourteenth century. The forms of expression used in it serve as landmarks in the development of the language.

The species of literary composition which came into prominence about this period was the champu. In it prose and verse are intermixed. A great number of champūs have come down to us.

There is no means of knowing their authorship or date. It has already been indicated that the Malayalam champus had their origin in the $Ch\bar{a}ky\bar{a}r\,k\bar{v}thu$. They generally begin with a benediction. Most of them deal with purapic stories, the narration being in the form of a declamation. In the Malayālam champūs the prose passages, though technically so called, are poetical in form and conception. The authors of chambus often paid greater attention to details of description than to narration or story-telling. Figures of speech and bold conceits are very common. Passages from wellknown Sanskrit works are freely quoted without acknowledgment. In respect of the wealth of ideas and lovely poetic imagery the champus are unrivalled. There are passages in them which show that there is no height to which the poets could not ascend. But in others they descend to vulgarity. The authors of the champus were mostly Nampūthiri Brahmans. Wit, humour and sarcasm were used by them as the most effectual weapons against social evils.

Many of the older champüs are attributed to Punam Nampūthiri. Whether this type of composition existed in Malayālam before the time of Punam has Punam Nampūthiri. not been satisfactorily ascertained. Punam is believed to have lived in the latter half of the sixth century and the early part of the seventh century M. E. He was a contemporary of Mānavēdan Śakthan Thampurān of Calicut*and Chēnnas Nampūthiri, the author of the Thanthrasamuc'hayam. Řāmāyanam Champu is the most famous of the works of Punam. It is a happy blending of elevated thought and elegant expression. Composition in Malayālam or in manitravāla was in those days considered to be beneath the dignity of a first-rate poet.

^{*} Mānavēdan's Court consisted of Pathineṭṭara Kavikal, eighteen and a half-poets, Punam being considered only arakkavi or a 'half-poet' because he wrote in Malayālam.

So Punam who wrote in manipravāļa was humorously called an Arakkavi (half-poet). But the poet's talents were of such a high order that Uddanda Śāstri who visited Malabar and paraded his learning 'triumphing like a lion over elephants' went into raptures over the poetic genius of Punam.

The literary models set by Punam were followed by Works like Kājarathnāvalīyam, Kotiyahis successors. viraham, Nārāyanīyam, Bhāratham and Other champūs. Malamannalam Chellūrnathodayam are some of the later Nampūthiri. chambūs. Naishadham is the best among the later chambus and ranks with the Kamayanam champu of Punam. What little we know of Malamannalam, the author of this great work, is gathered from popular tradition. He appears to have lived in the eighth century M. E. He was a profound scholar and a specialist in astrology. Muhūrthapadavi Bhāsha and Bhāshā Kāladīpam are two famous works of his on the latter subject. A modern critic takes the view that Chandrothsavam is another work of Malamannalam. But the evidence in support of that opinion is feeble. Chandröthsavam is an exquisite work, full of impassioned eloquence and lovely imagery, though the thought is sometimes unedifying.

In the mediaeval Malayāļam period the outstanding names are those of the Niranam poets, so called from their native village Niranam in Central Travancore. Their period is fixed between 550—650 M.E. In their works Malayāļam began to assert its independence. Řāma Paņikker was the greatest as he is also the best-known of the Niranam poets. He was the author of Řāmāyanam, Brahmānḍapurānam, Šivarāthrimāhāthmyam, Bhāgavatham, Guru-gīta and Padmapurānam. His works are translations from Sanskrit; but they are characterised by an originality of treatment,

a haunting melody of verse, a richness of ideas and an all-pervading sense of beauty. His language shows the transition stage of Malayalam, a stage in which Malayalam tried to throw off Tamil inflections and Tamil grammatical There were two of his relations also, Madhava Panikker and Sankara Panikker, who wrote poetry in that period. The language of the Niranam poets has been described as bhāshāmisram, a mixed language. They seem to have been the first to over-ride the rule that in Pattvs, manipravālam style should not be used. They popularised a peculiar metre which has become known as Niranavrtham. The long and majestic verses move on with a rather sluggish pace. Each line has thirty-two mātrās. The particle 'e' is freely used as a vākyālankāram. A characteristic feature of their works is the anthaditrasam, every succeeding stanza beginning with the last word of the preceding one, a device which greatly helped to preserve the purity of the text in those days when printing was unknown.

Cheruśśeri was the last and the most popular of the Middle Malayalam poets. He is believed to have lived between 650 and 750 M. E. 'The history of Cheruśśeri. his life is shrouded in obscurity. He is supposed to have been born in Cheruśścii Illam at Vatakara in Kurumpanād taluk, British Malabar. Some critics have attempted to identify Cheruśśeńi with Punam Nampūthińi, the author of Kamayanam champu. But their arguments have not met with general approval. Cheruśśeri wrote Krishnagātha in obedience to the behest of Udaya Varma, the king of Kolathunad as shown by the colophon. He was also the author of Bhārathagātha, which, however, appears to have obtained no great popularity. Krishnagatha is one of the most beautiful poems in Malayalam. As the name indicates, the theme of the poem is the story of Krishna. A poet of the highest creative faculty, gifted with an extremely keen sense of beauty, Cherusseri probed into the mysterious depths of the human heart. He painted in fascinating colours the loveliness of nature. The charm of his poetic art is such as would keep the readers and listeners spell-bound. Whether in suggestiveness, which is considered to be the highest achievement in poetic art by the ālankārikās, in elaborate alankārās, or in the fanciful play of words, he is an unrivalled master. A delicate but effective humour appears in appropriate places forming a most interesting feature of his art. Though all rasās and sentiments are elaborately treated in his works, Erngāra is his favourite emotion. Reference may also be made to the fact that he was a great reformer of the language. The sweet manjari metre has contributed immensely to the grace and beauty of his style. He was not addressing the cultured and the leisured few only as the authors of the champūs did. He had in mind the lowly masses who loved Krishna and liked poetry, but were ignorant of the Sanskrit language. The poet was a great devotee of Krishna, so much so, that in the closing passages of his wonderful poem he indulges in the bold hope that when he went to heaven, which he was sure to do, he would be received by angelic forms with the kindness and consideration which were his dues.

There is another species of poetic composition which deserves mention here, viz., the ballads. The most prominent of this class are the Vatakkan Pāṭṭuka!. The term comprehends a large number of popular songs current in North Malabar. The Anchu Thampurān Pāṭṭu and Eravikkuṭṭippiḷḷappāṭṭu current in South Travancore, though later in point of time, belong, more or less, to this species. The Vaṭakkan Pāṭṭūs do not, all of them, belong to the same period. There is no other branch of Malayāḷam poetry which shows a like freedom from Sanskrit influence, both in diction and in ideas,

The imagery is drawn from what the poets saw in their own country. The songs describe the social condition of the times, the sense of honour and the spirit of chivalry. The achievements of heroes like Thac'holi Thēnan, Kōmappan and Chanthu are described with patriotic fervour. People of those days, generally speaking, seem to have been straightforward in their dealings. They considered honour dearer than life. Women were greatly honoured. Instances are not wanting in which women encountered enemies in bloody duel and made them lick the dust. If poetry is the concrete and artistic expression of the human mind in emotional and rythmical language, a mirror reflecting nature and the life of man in its varied aspects, these songs will always be valued by the Malayālis and will continue as the genuine monuments of a glorious past.

For sometime after Cheruśśēri the field of Malayālam literature appears to have been rather unproductive.

Several songs and devotional lyrics and a number of minor works, mostly belonging to the champu class, were the productions of the period. These works need not be considered separately, for they are for the most part imitations of the literary compositions of the preceding age.

But this period of comparative inanity was more than compensated by the appearance in the literary horizon of a bright luminary who was destined to ascend the meridian of glory for the lasting good of Malayālam literature and the enlightenment of the Malayāli race. Thunchathu Kāmānujan Eluthachan belonged to a community which occupied an inferior position in the social scale. He was born at Veṭṭathunād in the Ponnāni taluk in the latter half of the eighth century M. E. The goddess of learning claimed the young poet as her own from his tender years. Kāmānujan soon

acquired the rudiments of knowledge which he cultivated by intensive study and extensive travel. Sanskrit was even then the language of culture and the refined medium of poetry. But Eluthachan became alive to the claims of Malayalam and other Dravidian languages. He visited various parts of South India and soon gained a good knowledge of Tamil and Telugu in addition to Sanskrit and Mala-He assimilated so well the moral and religious thought of the ancient sages that he was able to leave behind him, in his works, a rich legacy of thought and culture for the permanent benefit of his countrymen. In his hands the kilippāttu reached its perfection. This form of composition has obtained its name from the poetic fiction that the verses are primarily sung by the kili or parrot, the pet-bird of the goddess Sarasvathi. As a rule, Dravidic meters alone are used for kilippāttu, the Kika, Kākali, Kalakānchi and Annanata being the more important ones popularised by Eluth-Of the several subdivisions of literary form in Malayalam, the Kiliptattu is the richest, possessing as it does the invaluable treasures of Eluthechan's works. It is recognised to be the best medium for religious poetry and is immensely popular among all classes of the people.

Of the Kilippatti's of this premier poet Adhyāthma Kāmāyanam, Mahābhāratham and Bhāgavatham are the best known. Adhyāthma Kāmāyaņam is His works. decidedly the most popular poem in the Adhvåthma Ramayana. language. Although a translation from Sanskrit, it shows an admirable originality of treatment. As the name indicates, it deals with the story of Kama, an incarnation of Vishnu, the inner principle of the Universe. The grandeur of its thought and the superb majesty of its diction transport the reader and the listener to high altitudes of moral elevation and spiritual beatitude. Its place is as high in literature as it is in the religious life of Malavāli Hindus.

The Mahabharatha is an epitome of Vyasa's work of that name. This is a concentrated essence of the thought and piety of Badarayans Vyasa, that ocean Mahabharatha. of knowledge and wisdom. The poet himself expresses his conviction that every thing worth knowing which may be gathered from all the other books has found its place in the Mahābhāratha, and that what is not there will not be found anywhere else. In that stupendous work are a lakh of stanzas, seven times the length of the Iliad and the Odyssey combined, and it takes in it lengthy narratives, episodes, homilies and profound philosophical disquisitions. "A hundred poets wrote it, a thousand singers moulded it." So vast is its range. But Eluthachan was able to clarify the whole and present it in soul-stirring language in his adaptation which is held by the outstretched hand of time to illumine Kēraļa for ever. The power of selection and rejection exhibited by him is unrivalled. The language used by the poet in the Mahābhāratha is generally simple and lucid and possesses remarkable power at the same time. It served as a model for the later poets.

About the authorship of Bhagavatham, there is difference of opinion among the critics. Some hold that Eluthachan wrote only a portion of the book Bhagavatham and which was afterwards completed by others. other works. The importance of Bhāgavatham is greatly due to its religious appeal. It is a Mahāpurāna which attempts to bring within its range the highest wisdom concentrated in the pursuit of Brahman, while at the same time it endeavours to acquaint the reader with the treasures of secular knowledge transmitted by the Rishis of India through the ages. Harinamakirthanam, a small devotional piece and Chintharathnam an exposition of philosophical truths are two poems of wide popularity. The authorship of Irupathunaluvrtham, generally believed to be a juvenile

composition of Eluthachan, has of late been a subject of much controversy. Be that what it may, the poem, although marked here and there by immaturity of art, is one of the most beautiful works in Malayālam. The author has freely used several passages of Punam's Ŕāmāyaṇa Champu and translated many verses of the Bhōja Champu and the Ŕaghuvamśa. The elegance of its thought and its mellifluous music have been, and will always be, the delight and the consolation of all those, irrespective of age or sex, who treasure the memory of Ŕāma and Sīta.

Eluthachan's memory is enshrined in the hearts of all classes of the people. His verses are recited and repeated throughout the country as authori-Eluthashan's tative pronouncements on moral principles contribution. which govern society. More than that, he is regarded as the father of modern Malayalam literature. His contribution to the literature and culture of Kerala stands unique. Until his time Malayalam was regarded by Sanskrit scholars as an undeveloped and undignified language unworthy of recognition. Punam, for example, was considered only 'a half-poet' by the scholars of his time notwithstanding his superior merits. But Eluthachan's works gave the language a permanent stamp of importance which the Sanskrit scholars were obliged to recognise and to admire. Their inspiration to later literature was marvellous.

Melputhur Nārāyaṇa Bhatṭathiri, the author of the famous Sanskrit work, Nārāyaṇīyam, was a contemporary Nārāyaṇa of Eluthachan. Though all his important Bhaṭṭathiri works are in Sanskrit, Bhaṭṭathiri is one of the most venerated of the Kērala poets. Nārāyaṇīyam is a devotional poem far excellence. It is an epitome of the Bhāgavatha, composed in the fervour of devotion, in the famous temple of Śrī Krishṇa at Guruvāyūr where the poet lived and worshipped the deity to get cured of his

painful rheumatism. The poem is read and appreciated most widely in Kēraļa and is well-known in wider India. Bhattathiri wrote several Sanskrit Prabandhams besides two treatises Prakriyāsarvaswam and Dhāthu kāvyam, on Sanskrit grammar. Some works in Malayālam are also attributed to him.

Santhanagopalam, Jnanappana * and Bhasha Karnamrtham are some of the remarkable smaller works in Malayalam assigned to this period. Pünthánam author of these poems was Punthanam Nampūthiťi. Namrūthiri who is reputed for his engrossing piety. An interesting anecdote is related about the meeting of Punthanam with Melputhur Bhattathiri in the Guruvayur temple. One day, so the story goes, Punthanam approached Melputhur and besought him to listen to a recitation of his Santhanagopalam. little regard for Malayalam, and entertaining an ill-di-guised aversion for poets who wrote in that language, Melputhur declined the invitation. Punthanam felt the insult sorely. Krishna appeared to Melputhur in a dream the very night and declared that he preferred the devotion of Punthanam to the erudition of Melputhur. The legend has a significance in that the powers of the Malayalam language were beginning to be acknowledged.

Karuṇākaran Eļuthachan and Śūrinārāyaṇan Eļuthachan, the disciples of Kāmānujan, continued the work of their master. The former was the author of Brahmānda purāṇam and Vēthālacharitham and the latter of Skāndapurāṇam. Gōpālan Eļuthachan who belonged to the same school was the author of Pārvathīswayamvaram Kilippātṭu. The works of these poets are nothing more than tolerably good imita-

^{*} Pana is a kind of metre marked by slow movement.

tions of Kāmānujan Eļuthachan. Thus, the period which immediately followed the time of Eluthachan was not productive of any great literary work of permanent importance.

The first half of the ninth century M. E. saw a great poet in Kerala Varma Raja of the Kottayam ruling family, who lived in Trivandrum for several years Köttayam to help Umayamma Rāņi in the govern-Kēraļa Varma. ment of the country. He was adopted into the Travancore ruling family and was given the title of Prince of Hiranyasimhanallur (Iraniel). The prince was as great a scholar as he was a warrior and administrator. He was a devotee of Śrī Pörkali Bhagavathi, to whose blessings is attributed the greatness of his achievements. His translation of the Valmiki Kamayanam is a work of great power and pathos with literary excellence of a high order. The work of translation was done while the author was in Trivandrum at the feet of Śrī Padmanābha, as he himself has chosen to record in the prelude to his His Ramayanam is left incomplete as he met with a tragic end having been assassinated while asleep. The poet is as good in description as in narration. The nature scenes painted by him are vivid and picturesque. Vairāgyachandrodayam is another work of his which has come down to us. It is characterised by a wealth of philosophy and spirit of true devotion to God.

Of the other poets of this period few are worthy of note. Chelapparampu Nampūthiri was an improvvisatore of great talents. He has left us no great work. There are a few stray stanzas which, however, do great credit to their author. He is known to have written an āṭṭakkatha, Pāṭṭuṇṇicharitham, which, however, does not appear to have been popular at any time. Tradition says that on one occasion a princess of the

Zamorin's family, hearing of his extraordinary talents for extempore versification, invited the young poet to an audience. She was so poorly impressed by his personal appearance that she did not extend to him a warm reception. Smarting under the affront, the poet pulled up his courage and his genius and composed a stanza exhibiting rare poetical talent, stirred the vanity of the princess and made her a captive. She changed her attitude and welcomed him with feelings of the warmest admiration and delight.

There are several anonymous poems, hymns and songs which are assigned to this period. Some of the devotional pieces are of rare merit. There is also a considerable body of prose compositions in this epoch. It will, however, be more appropriate to deal with these last in sketching the growth of Malayāļam prose.

In the first of half of the tenth century M.E. flourished Rāmapurathu Vāriar, * the author of Kuchēlavṛtham Vanchippāṭṭu, a short exquisite narrative-lyrical poem dealing with the story of Kuchēla. The details of the poet's life are not known. He led a pious life and being extremely poor depended for his sustenance on the free meals supplied in the Vaikom temple. Once, while Mahārāja Mārthānḍa Varma paid a visit to that temple, Vāriar dedicated to him a few stanzas composed in his honour. The Mahārāja was so pleased that he commanded the poet to accompany the royal party to Trivandrum. It is generally believed that Kuchēlavṛtham was composed by him during the course of the

^{*} Several scholars, including the late Mr. P. Gövinda Pillai, the author of Bhāshācharithram, state that Vāriar composed Kuchēlavrtham in obedience to the command of Kārthika Thirunāl Mahārāja. This, evidently, is an error as may be seen from the numerous panegyrical references to Mārthānda Varma Mahārāja in the beginning of the Vanchippāṭṭu as the reigning sovereign. And the absence of any reference to Kārthika Thirunāl Mahārāja serves to confarm this conclusion.

journey at the royal command. Tradition goes on to state that the poet stayed at Trivandrum for a few months enjoying the gracious hospitality of the royal patron. When he took his final leave, the Mahārāja treated him with kindness but gave him only what was required for the fare from Trivandrum to his native village. Vāriar was sorely disappointed. But when he reached the Vallakkadavu boat jetty at Trivandrum, he saw several officers ready to attend on him. On reaching home, like Kuchēla, whose story he sang, he was astonished to see a mansion where stood his poor cottage. Thus did the illustrious Mahārāja follow the divine example of Krishna by this rare act of noble charity shown to an indigent but devoted scholar.

Kuchēlavṛtham is the best and certainly the most popular Vanchippāṭṭu in the language. Vanchippāṭṭu is a boat song. In Vāriar's hands the species attained its highwater mark of literary perfection. The excellence of the poem has won its author a very prominent position in the galaxy of Malayāṭam poets.

Another species of composition which reached its meridian of popularity about the time of Marthanda Varma and Kāma Varma his successor Kathakali. was the Kathakali. The Kathakali is a variety of drama peculiar to Kerala. Scholars are inclined to hold that its roots may be traced to the Chākyār Kūt'hu and Kūtiyāttam which have been already described. It is also believed that its evolution was the result of a blending of the elements from the Bharathanātya, the Sanskrit nātaka, and Jayadēva's Gīthagovinda. The characters express their ideas not by words but by significant gestures. The movements are adopted from the Bharatha nātya with suitable modifications. The conversations between the characters, as well as the narrative portion of the story, invariably in verse, are recited in a loud voice by the Bhagavathar to the accompaniment of musical instruments. The action is prompted by his words. This is an important point of difference from the Sanskrit drama. There are also certain other rules of Sanskrit dramaturgy to which the Kathakali does not conform. For instance, in the Sanskrit drama the sambhoga śrngāra is not acted on the stage. Fights and tragical deaths are also not represented. In the Kathakali, however, these events form a special attrac-Many of the Kathakalis end in Vadhams, i.e., death of the nāyaka or the upanāyaka. This element was supplied, it is believed, to please the military section of the audience who in those days formed a prominent class. The general structure of the Kathakali is more like Jayadeva's Ashtapadi (Gīthagovinda) than anything else. In fact the Chākvārs had been accustomed to stage the Githagovinda in temples during festivals.

Tradition ascribes the origin of this species of histrionic entertainment to Mānavēdan Śakthan Thampurān,

a Zamorin of Calicut, who belonged to the seventeenth century. It is said that the Zamorin had once a vision of Krishņa through the blessing of the great ascetic Vilvamangalathu Swāmiyār. In commemoration of that incident he conceived the happy idea of staging the divine life of Krishņa. The performance was therefore called Krishņātļam. His work was an adaptation of the Ashtapadi of Jayadēva. It is divided into eight parts, each designed for a night's performance.

Krishnātṭam was confined to North Kerala. It was Kottārakara Thampurān, a scion of the Travancore royal house, who invented the Kathakali then called Kāmanāṭṭam. The Kāja, so goes the story, requested the Zamorin to send his Krishnātṭam troupe for a performance at his court. But the Zamorin refused. Incensed at this discourteous behaviour the Kāja resolved to invent a new kind of play. He chose the

story of Rāma as his theme, the performance being consequently called the Rāmanātṭam. He also made an improvement on Krishnātṭam by substituting Malayālam for Sanskrit, which was the language thus successful in laying the foundation of a new type of histrionic literature which in later times was enriched by some of the finest works in the language.

Kathakali is performed during night time and it is announced by the beating of drum, technically called Kelikottu. The piece generally begins Its general features with a thēdayam or benediction, correspondand development. ing to the nāndi in the Sanskrit drama. The thedayam owes its origin to the Manjuthara in the Ashtapadi, which was recited at the beginning of the performance. The actors then appear on the stage, generally a banthal put up for the purpose. At first the actors recited the badams themselves while acting. This was changed by the Raja of Vettathunad giving greater facilities to the actors to concentrate their attention to acting by signs and by gestures. The singing came to be done by professional song-The angua language used in the kathakali to explain the meaning of the padams sung by the songster is wonderfully perfect and exact in every detail. Emotions are successfully represented by artful gesticulations and delicate facial expressions. Various subtle and delicate sentiments are expressed by the eyes, which demands patient training on the part of the actor. Sometimes one sentiment is exhibited by the right eye while a totally different one is expressed by the left. In the Utharaswayamvara, for example, the śōka rasa (sorrow) is expressed by one eye, while the kopa rasa (anger) is represented by the other simultaneously. These are difficult feats indeed, but the kathakali actors display wonderful skill in their performance. ..

The dress and scenic equipment also underwent general change. The wooden masques designed by the

Koţṭārakara Thampurān gave place to the painted face. The painting is technically called chuṭṭikuthu. Kii ̄ṭam or helmet was introduced by Kaplingād Nampūthiri to whom chuṭṭi-kuthu owes its origin.

Kalladikkōdan Nampūthiri also effected certain reforms. On account of the innovations introduced by these reformers three types of āṭṭam came into the types of aṭṭam came into existence, the Veṭṭatˈhunāḍan the Kaplin-gāḍan and the Kalladikkēḍan. The difference between the three relates to minor details, especially in the āngya element. The first type in which the āngya was shown twice gained popularity in Travancore. The Kaplingāḍan type found favour with the Cochinites and the last gained currency in North Malabar. All these types have undergone gradual change and have given place to the modern kathakaļi which is a blending of the best elements in all the three

Kathakaļippāţţūs form an important branch of Malayāļam literature. As noticed previously, Koṭṭārakara

The history of Kathakali literature. Koţţā akara Thampuran. Thampuran was the first in the field to compose a regular āṭṭakkatha in Malayalam. He divided the story of the Ƙamayana into eight parts and composed his work in such a manner that each of the

parts sufficed for a night. The eight parts are: (1) Puthra-kāmēshţi, (2) Sīthāswayamvaram, (3) Vic'hinnābhishēkam,

- (4) Kharavadham, (5) Bālivadham, (6) Thōraṇayudham,
- (7) Sēthubandhanam and (8) Yudham. His works do not possess any great literary merit. But as the themes are episodes in the life of Śrī Řāma, they are often staged.

The next great composer of kathakali was Kōṭṭayathu Thampurān. He flourished between 840 and 920 M. E. He was a member of the Vaṭakkan Kōṭṭayam royal house in

Malabar, to which Kērala Varma, the author of Řāmāyaṇa also belonged. Krimmīravadham, Nivātha-kavacha Kālakēyavadham, Bakavadham and Kalyāṇa Saugandhikam are his well-known works. Tradition states that he was very dull in his boyhood. His accomplishments in later life are ascribed by him to the blessings of the goddess of Śrī Pōrkali whom he worshipped with ardent devotion. A poet of remarkable talents, he was also a reputed actor. His works are characterised by richness of thought and dignity of diction and are marked by unmistakable traces of comprehensive learning. The stage effect of his plays is remarkable.

Under the patronage of the illustrious sovereign Kārthika Thirunāl Mahārāja (899—973 M. E.), kathakali gained great prominence in Travancore. Kārthika Thi unā! Besides being a patron of arts and letters, Aswathi Thirunal. the Mahārāja was an erudite scholar and a great poet. He was conversant with several languages, both eastern and western, and was extensively read in their literatures. In spite of the troublous nature of the time, when his whole-hearted attention had to be concentrated on the protection of the kingdom and of his subjects from Tippu Sutlan, he found time to adore the muses and to extend his liberal patronage to posts and scholars alike. His best known kathakali works are Ŕājasūyam, Subhadrāharaṇam, Bakavadham, Gandharvavijayam, Pānchālīswayamvaram and Kalyāṇasaugandhikam. Prince Aśwathi Thirunal (931-969 M. E.), his nephew, was a poet of uncommon genius set to advantage by systematic study. composed several works of which Kugminiswayamvaram, Ambarīshacharitham. Pūthanāmoksham and Paundrakavadham are the most important. All of them are greatly valued. Aśwathi Thirunal died a premature death. But his work during that short span of life has left an indelible impression on Malayalam literature. His style is rich and graceful.

The service rendered to the cause of kathakali by these two royal patrons cannot be over-estimated. When the reigning sovereign showed a partiality Its popularity. to this branch of literature, it naturally became increasingly popular. Further reforms were introduced in the costume of the actors as well as in the stage arrangements. A kathakali troupe was organised as an appendage to the palace staff. The example was followed by the aristocracy of the land. Kathakali performance became a necessary and important entertainment on festive occasions, particularly in temples. On the occasion of the marriage of members of royal houses and other well-to-do families a kathakali, generally a swayamvaram of some puranic heroine, such as Sitha or Damayanthi, was considered auspicious.

In the time of Karthika Thirunal Maharaja flourished Unnāyi Vāriar, perhaps the greatest of the kathakali poets. Vāriar was a native of Irinjāla-Unnāyi Vāriar. kuta in the Cochin territory but spent the greater part of his life at Trivandrum as a court poet. His work Nalacharitham has won for him immortal fame as one of the greatest poets of Kerala. The poem is divided into four parts, each intended for a night's performance. In originality of treatment, in the synthesis of appropriate sentiments, in the choice of suitable tunes for the songs, in the skilful delineation of character as well as in the creation of appealing situations Unnayi Variar stands unsurpassed. A special feature of his āttakkatīla is that the technicalities of the Sanskrit drama are observed more than in any other Kathakali. His style has been described as a venkala bhāsha, an alloy language. Vāriar's fame rests mainly on his kathakali which gave inspiration to many of his successors. He wrote Girijākalyāņam, a long poem, which also occupies a prominent place in literature.

The next composer who advanced the cause of katha $ka^{\dagger}i$ was Ravi Varman Thampi, popularly known Irayimman Thampi (958-1031). He was a Iravimman post of great originality and deep learning. Thampi. He is said to have lisped in numbers, which elicited the admiration of his royal patron. Kārthika Thirunāl. He composed three āttakkathās Kichakavadham, Uťhaŕāswayamvaŕam and Dakshayāgam, based on episodes from the Mahābhāratha. They are highly admired both for their literary excellence and for their stage effect. is noteworthy that he attempted to collect and edit all the āttakkāthās available during his time. One of the most popular of Thampi's compositions is a tharattu or lullaby beginning with \(\bar{c}\)manathinka/kkidav\(\bar{c}\), which by itself is sufficient to give him a place among the great lyrical poets. It is redolent with a delicate sense of beauty. Subhadraharānam and Rāsakrīda are two thirwathirappattis. Navarāthriprabandham, Murajapappāna and several devotional pieces and love songs are among his other works. His great musical talents have lent a delightful charm to his poetical compositions.

Vidwān Köil Thampurān (987—1021 M.E.), was the author of the famous āṭṭakkatha Śāvaṇavijayam. He Vidwān Köil belonged to the family of Kilimānūr Thampurān. Köil Thampurāns traditionally reputed for learning and proficiency in fine arts. He died at the early age of thirty-three. Rāvaṇavijayam is universally appreciated. Santhānagōpālam Thuḷḷal is another of his works. His erudition in Sanskrit was phenomenal. Both Vidwān Köil Thampurān and Irayimman Thampi were respected and patronised by the illustrious Mahārāja Swāthi Thirunāl.

The next generation of poets kept alive the interest in the kathakali literature by their liberal contributions.

Ilaťhūr Řāmaswāmy Šāstrigal's Jalandhaŕāsuŕavadham, Uthram Thiŕunāļ Mahāŕāja's SimhadhwaTheir successors. Uthram Thiŕunāļ Mahāŕāja's Simhadhwajachaŕitnam, Kēŕaļa Varma Valiya Kōil
Thampuŕān's Matsyavallabhachaŕitham, Hanumad Utbhavam, Pralambavadham, Dhruvachaŕitham, and Paŕaśuŕāmavijayam are fairly well known. Sarvajnavijayam by Ananthapuŕaťhu Mūťha Kōil Thampuŕān, Duryōdhanavadham by
Vayaskaŕa Mūsu, Mārkaṇḍēyachaŕitham by K. C. Kēśava
Piḷḷai, Hiřaṇyavadham by Chakrapāṇi Vāŕiar are noteworthy. The older works, however, still command the field.

Of the authors of the present generation very few have attempted this species of composition except Vallathol Nārāvaņa Monon and Mr. V. Krishnan Its present state. Thampi. The valuable efforts of Mr. Nārāyaņa Menon who founded the Kēraļakalā Mandalam to disseminate the art and culture of Kēraļa, have been of immense service in the popularisation of kathakali in and outside Kēraļa. Mr. Vadaššēri Krishņan Thampi whose sad death occurred in 1113 endeavoured for many years to bring about a rejuvenation of interest in kathakali. His Chūdāmaņi, Vaļļīkumāram and Thādakāvadham are fine pieces. The merits of kathakali are now being appreciated throughout the country. The liberal patronage extended by His Highness the Mahārāja Śrī Chithira Thirunal has proved a wonderful incentive to its increasing popularity.

The last few paragraphs have been devoted to a narration of the development of kathakali and the growth Kunchan Nambiyār.

of its literature down to modern times in order to present a connected picture. The works of a few later poets had, therefore, to be mentioned. But in order to describe the continuous development of Malayālam literature we have to go back to earlier times. The reigns of Mārthānḍa Varma, and Kāma Varma Mahārājās witnessed a remarkable efflorescence of poetry. The

patronage which they extended to poets bore rich fruit. The outstanding names among them are those of Unnayi Variar and Kunchan Nambiyar. The former's reputation rests on a single poem which was chiselled into an exquisite work of art with as much industry and genius, embellished by fascinating ideas and endowed with soul-stirring music. Kunchan Nambiyar, on the other hand, was a prolific writer who tried his hands in various forms of composition in all of which he achieved signal success. His poetic genius was luscious, all-embracing and vigorous. His learning was vast and his powers of observation of men and things so keen and so varied that he was able to adapt the concepts of the great poets of antiquity to the conditions of Malabar society. He was like a great fountain from which issued forth copious streams of poesy which pleased his contemporaries and enriched his mother-tongue for the delectation and edification of posterity. Nambiyar did not reach the same height as Eluthachan in the sublimity of his thought, the grandeur of his expression or the enthralling spiritual fervour which transports the reader and the listener into the high elevations of religious awe and devotion. his own line of giving instruction by pleasing, he stands unrivalled. He enjoys a popularity throughout Kēraļa next only to that of Eluthachan's.

Nambiyār was born in Kiļļikurichimangalam in Malabar. Having spent his earlier days at the court of the his early life and works.

His early life and to Trivandrum when Mārthānḍa Varma captured that kingdom. Even as a boy, he is reputed to have composed verses which indicated promise of a brilliant future. He tried all species of poetic composition prevalent at the time, Kiļippāṭṭu, Maṇipravāḷa Kāvyam, Thiruvāthirappāṭṭu, Kīrthanam, and Vanchippāṭṭu. His works in each of these types are commendable and are widely read by all sections of the people.

Nambiyār's fame chiefly rests on his thullal works. Thullal was a new species of poetry, but it must be recognised that he owed a great deal to the chākyār The general features kūthu, the champīs and the kathakali. of Thullal. the thullal the actor himself recites the piece assisted by his party. The thullal is generally a metrical narration of some puranic story. The metre adopted in thullal is the same as that used in the so-called prose passages of the champis. At the same time, Nambiyar enriched Malayalam by introducing new metres. In delineating character he had always in view his Malabar audience. He therefore gave a local colouring to the puranic stories and characters. He used poetry as an instrument of social reformation. There are few communities or types of people who have escaped the flagellation of his irony and satire.

Nambiyār popularised three types of thuḷḷal: Ōṭṭan, Sīthankan and Parayan. Of these, the first and the second are so called from the way in which they are recited, the tune in čṭṭan thuḷḷal being rapid and that in sīthankan slow. The parayan thullal is well-suited for the narration of pathetic stories.

Nambiyār's works are numerous and they belong to various types, the thu!/al being the most important. Among his miscellaneous works, Pathinnālu Vṛṭham, Śīlāvathi, Paṭhu Vṛṭham, Irupaṭhinālu Vṛṭham (Bhāgavatham), Śrī Krishṇa Charitham, Naļa Charitham Kiḷippāṭṭu, and Panchathanthram Kiḷippāṭṭu are the more prominent ones. He has written some āṭṭakkathās as well.

Nambiyar was a poet of uncommon genius and sound common sense. He was the first to write poetry mainly to please the rank and file. At the same time his works show a high degree of culture and a great wealth of learning though they are occasionally marred by useless repetitions, and

unnecessary digressions. His apology seems to have been that he was catering to people of all sorts and conditions. For the same reason he chose a language which would be easily understood by all.

Much controversy has raged on the question of the identity of Kunchan Nambiyār and Ŕāma Pāṇivādan.

There are several works in Sanskrit and Kunchan Malayalam ascribed to the latter. In the Nambiyar and Kāma Pāpivādan. opinion of some scholars Rāma Pāņivādan was the pseudonym assumed by Kunchan Nambivar in his Sanskrit compositions. The more important works ascribed to Kāma Pāṇivādan are three Sanskrit dramas, Chandrikāvīthi, Madanakēthucharitham, and Sīthārāghavam, two epic poems, Vishnuvilāsam, and Raghavavijayam, and two devotional pieces, Mukunda sathaka and Siva sathaka. reasons urged to establish the identity of these two poets need not be detailed here. If Kāma Pānivādan was different from Nambiyar, it is highly improbable that such a great poet should have remained obscure till recent times. On the other hand, it is equally difficult to believe that Nambiyar kept himself under a bushel deliberately and concealed his authorship of Sanskrit works from his contemporaries.

Kallekkulangara Kaghava Pisharoti, Katiyankulam Suppu Menon, Kalakkathu Kaghavan Nambiyar, Kalakkathu Damodaran Nambiyar, Balakavi Kama Swathi Thi unal Sastrigal, Vidwan Kurup and Pandarathasan were some of the minor writers of the next generation. During the first quarter of the last century flourished Swathi Thirunal Maharaja, a talented poet and admittedly one of the greatest musicians and musical composers in South India. He was a lover and patron of fine arts. The bulk of his musical compositions, is in Sanskrit. One of his well-known literary works in

Malayālam is Uthsava prabandham, a poem of considerable merit, written in a sort of *champu* style.

The growth of the language after the time of Swathi Thirunal Maharaja is remarkable. The growing influence of western languages, especially English, Modern Times. has been the most important factor which has shaped the literature during this period. But it cannot be said that Sanskrit has relaxed its hold to any appreciable degree. The printing press has exerted a great influence during this period. The facility to publication paved the way to the popularisation of works old and new. In former days, the cost of making out copies was high and it was only the well-to-do classes who were able to own copies of even standard works like the Kamayana. But now books have become cheap and the multiplication of schools created a reading habit even among the lower strata of society. Men educated in the English language began to occupy high positions in the public service and some of them interested themselves in the improvement of the literature. The pandit point of view yielded to the standards set by persons of this class who were able to visualise a broader horizon. The notions of literary taste changed. Ideas of authenticated history, geography and other sciences found their echoes in Malayalam books. The best intellect of the country was, however, devoted to government service and the liberal professions which opened the way to wealth and influence. For sometime there was an apotheosis of English in the same manner as in the old days Sanskrit commanded the undivided attention of the teacher and the student. The aristocracy of learning obtained their aliment from English literature. English became the language of official communications, arguments in courts of justice, and even of friendly correspondence between persons of importance. Malayalam schools, such of them as existed, were regarded as an inferior class of educational institutions.



Kaladi.

acouraging instruction in government But that instruction was of a at was in English schools ar rbitrar exerted a bad influence tional ide pople with leisure, especially those belonging to tic classes. kept up the traditions of the old learning devoted their time to metrical composition. The language of the court was still Malayalam. But for nearly a hundred years the Dewans were generally persons with Tamil or Telugu as their mother-tongue. Some of them spared no efforts to broaden the base of education as well as to raise its altitude. But interest in the growth of Malayalam literature they had very little. In the time of Sir T. Madhava Rao, however, certain efforts were made to ensure the development of Malayalam, so that it might become a good medium of literary and scientific knowledge. The Text Book Committee which was sanctioned by the Mahārāja Ayilyam Thirunāl under his advice created a remarkable change.

Of that body Kerala Varma Valiya Koil Thampuran, was a member and afterwards President. His famous translation of Kalidasa's Sakunthala has won for him the popular title of Kerala Kalidasa. A scholar and poet, unequalled in Kerala at the time, he was a most healthy source of inspiration to the literary men of the period.

He was a prolific writer both in Sanskrit and Malayālam. Visākhavijayam, Kamsavadham champu, Kshamāpaṇasahasram, Thulābhārasathakam, Kam, Yamapraṇāmasathakam, Pādāravindasathakam, Vyāghrālayēsasathakam, Śrngāramanjari Bhāṇa, Thirunālprabandham, Amrthamathanam, Nakshathramāla and Victoriyācharitham are some of his Sanskrit

works. His annotations of Śukasandēśam and Prakriyā-sarvaswam are also fairly known.

In Malayālam his works are numerous. Of his kathakalis mention has already been made. His Mayūrasandēsam elicited the highest praise from his contemporaries. The poem relates to a sad episode in the life of its author. It is an imaginary message sent to his consort through a peacock from Haripād where he had the misfortune to live as a State prisoner.

One of the chief titles to fame of Kēraļa Varma is that he is the father of Modern Malayāļam prose. To appreciate fully his contribution it is necessary to trace briefly its previous history.

According to Govinda Pillai, the historian of Malayālam Literature, prose had its origin in very ancient times. The chronicles of temples, records of reli-Malaya'am prose. gious endowments and other gifts made by royal and aristocratic families embodied in inscriptions and copper plates reveal the earliest phase of prose in Malayalam. They are written in long-drawn sentences. Dr. Gundert has examined the Telicherry chronicles and testified to their immense value as the specimen of early prose. The earliest among them are in the vatteluthu script. later ones are in the modern characters. It is generally believed that prose in early times was seldom used for literary purposes. This view, however, is not correct; for, so early as the fifth century M. E. prose seems to have attained a considerable degree of maturity as may be inferred from random references to works like Abhimanyuvadham mentioned in Līlāthilakam. Several old prose works which may be assigned to the fourth, fifth and sixth centuries M. E. (14th to 16th centuries A.D.) have now been brought to light. Līlāvathi, Bhagavad Gītha, Mathavilāsam, Brahmānandavivēkam, Thamprākkalbhāsha, Vāsavadatha, Gourikatha, Kēralacharitham, Bhagavatham (Tamil), etc., deserve

special mention. Sanskrit influence is seen predominating in the early prose works. Many words and phrases found in them have now become obsolete.

Among the early prose compositions which have come down to us there are two which have to be particularly noted. The first is Samkshēpavēdāntha by Dr. Joseph Kariyāttil, who was Bishop of Cranganore. This was the first Malayālam book to be printed, the printing being done at Rome in 1772 A.D. The second is a voluminous account of Kariyāttil Mar Joseph's voyage to Rome (1778—1786). It was written by Paramakil Governodōrac'han. The book is highly valuable both as a piece of history and as a specimen of the prose of the period.

The growth of prose literature, however, appears to have been tardy. Some of the royal messages sent by Kārthika Thirunāl Mahārāja to his minister Rāja Kēsava Das, which are now published, show that simple and elegant prose was written in those days. The historic proclamation of Vēlu Thampi made from Kundara in 984 M.E. and a few other State documents as well as the letters and proclamations of the Rānis, Gouri Pārvathi Bāyi and Gouri Lakshmi Bāyi are important literary records which lend considerable help in tracing the history of prose in the south. Sanskrit influence which was so predominant in the earlier prose writings is seen to be on the decline, its place being taken by English. This process slowly but steadily gathered strength. By the time of Ayilyam Thirunal Maharaja (1036—1055) a distinct type of prose had evolved itself. Minakethanacharitham and a prose version of Sakunthalam, written by him, although characterised by a large admixture of Sanskrit words, may be taken to be the earliest specimens of prose works of the modern period.

Such was the condition of Malayāļam prose on the eve of the period ushered in by Kēraļa Varma. Within a short time he was able to write a large number of books,

primarily intended for use in schools. Some of them published under the auspices of the Book Kerala Varma's Committee have become almost classical. contribution. Vijnānamanjari, Sanmārgasamgraham and Sanmargadīpika are still read. Amongst his prose works, Mahac'haritham and Akbar deserve special notice. former is a collection of biographical sketches of eminent men and the latter a translation of a novel relating to the reign of Akbar. His 'Akbar' was the first work of its type in Malayalam and it laid the foundation of a new species of literature. Steeped in Sanskrit lore and deeply erudite in the classical works, Kērala Varma chose for himself a highflown and sanskritic diction in his novel, which makes it difficult reading for all but the scholars. This, however, was not the case with his other works, which were written for the school boy and the lay reader. It was the language adopted by him in his smaller works that had an abiding influence in shaping the growth of Malayalam prose as we now see it. Kērala Varma's range of influence in the literary field greatly increased with his acceptance of the presidentship of the Bhāshāþēshini Sabha brought into existence by the assiduous labours of Varghese Māppila, a great lover and promoter of Malayālam literature. The magazine, Bhāshāpōshini, started as an organ of that Sabha under the guidance of Kēraļa Varma, has made valuable contribution to the development of Malayalam.

Prominent among the other prose writers were Appu Nedunnati, O. Chanthu Menon, C. V. Kaman Pillai, Vēnnayil Kunjiraman Nayanar Appan Thampuran, and Prof. Kaja Kaja Varma. The articles written in the Vidyavinādini by C. Achutha Menon and others were such as helped the growth of a pure prose style by holding out a high standard of constructive criticism.

Some of these authors deserve special mention. C. V. Kāman Pillai, is the novelist par excellence in Kēraļa. His historical romances. Marthanda Two eminent novelists. Varma, Dharma Kaja and Kama Kaja Bahadur, relate to the period of Marthanda Varma and his successor Kāma Varma. That he was equally great in the writing of the social novel is evident from Premamrtham. His works have become classics in the language. His style, though sometimes involved, is full of poetic imagery and characterised by deep feeling and powerful pathos, and at time it lends itself to scintillating In the construction of plot, in the delineation of character, in the skilful handling of situations and in reproducing dialogue, C. V. is a supreme master. His characters glow with life and carry home to the reader a conviction of reality. He has written a number of minor works, mostly farces, which paved the way for the growth of prose dramas modelled on the western type. novels of Chanthu Mēnon (1022-1074) are exceedingly popular. His two works are Indulēkha and Śārada. most attractive picture of the contemporary life of Kērala. the novels have won the admiration of all classes of readers. Indulekha was so much appreciated by Dumergue, Collector of Malabar, that he translated it into English. The characteristic features of Chanthu Menon's writings are simplicity, grace and perspicuity. They are rich in humour of the most enlivening character. Complex and intricate plot construction had no fascination for Menon. The portrayal of amusing situations and humorous characters was his forte. His delicate touches gave a special flavour to his descriptions of men and things.

Several novels both original ones, as well as translations and adaptations from foreign languages followed. They are of various types, historical, social, romantic, or detective. Appan Thampuran's Bhūtharayar and Bhāskara

Mēnōn, C. S. Subrahmoniyan Pōtti's Durgēsanandini, and Thālapushkariṇi, Jyōthishmathi of K. Nārāyaṇa Kurukkal, and some of the works of Tharavathu Ammālu Amma and T. C. Kalyāṇi Amma, are among the popular novels. The demand for cheap books of this kind is increasing and minimum merit finds patronage at the hands of enterprising publishers. The new productions cannot be said to come up to the level of Mārthānda Varma or Indulēkha. But that is the story of the English novel repeated in Kēraļa. Democracy in Literature results in prolificness, but not always in excellence. Literary ambition often bears fruit in works of permanent value in the form of novels. But more often the value of such periodic literature is ephemeral.

The success of Kērala Varma's Śākunthalam encouraged other writers to try their hand at translation of dramas from Sanskrit. Jānakīpari-The Drama. nayam and Uthafafamachafitham Chāthukkutty Mannādiyār (1032—1082), Āścharya Chūdāmani and Vikramorvasīvam of Kotuinallūr Kunju Kuttan Thampuran (1040-1088) Vikramorvasīyam of Kottarathil Śankunni and Chārudathan and Swapna Vāsavadatham of Professor Kaja Kaja Varma are notable productions of this species. Of these Mannadivar's translation of the Uthararamacharitham is admittedly the best. Sangithanatakās (musical dramas) were also composed during this period, of which Sangitha Naishadham of T. C. Achutha Menon and Sadarama of K. C. Kesava Pillai are fairly good examples. The first original drama was Kalvaninatakam by Kotunnallur Kochunni Thampurān. Thottakkāttu Ikkāvu Amma wrote Subhadrārjunam strictly following the Sanskrit model. Śrīkantēśwaram Pillai's Kanakalathāswayamvafam Padmanabha Pandavavijayam were once popular. The popularity gained by the nātakās was so great that many people who had no real aptitude for poetical composition took to play-writing. An effective corrective was administered to that undesirable enterprise by Řāma Kurup, a great humorist, by a merciless attack on all the poetasters in his Chakkīchankaram, a highly amusing satirical piece.

Another new growth of literature during the time of Kērala Varma was the mahākāvyam. This was the only species of Sanskrit composition hitherto Mahākāvyas. left unattempted by Malayālam poets. Śrī Krishnacharitham of Kunchan Nampiyar, though it mostly satisfies the conditions of a mahākāvya, is not called by that name. The want of mahākāvyas was, however, soon supplied by a number of poets who concentrated their attention either in composing original mahākāvyas or in producing translations. Kamachandravilasam by Alakathu Padmanābha Kurup (1045—1107) was the first mahākāvya. This poem scrupulously follows the rules laid down in Sanskrit rhetoric. The poet shows admirable mastery over the language in the composition of the chithra sarga, full of difficult and intricate play of words. Several works followed Ŕāmachandravilāsam. Of these Vanchiśavamśam and Pandavodayam of Kotunnallur Kochunni Thampuran, Umakēraļam of Uļļūr, Kēśavīyam of K. C. Kēśava Piļļai, Kukmangadacharitham of Panthalam Kērala Varma, Chithrayōgam of Vallathōl and Yēśuvijayam of Kaṭṭakkayathil Cheriyan Mappillay are prominent. Other Mahākāvyas of an inferior order have since made their appearance in Malayalam. "The Malayalam mahākāvyas", observes Nanthyarvīttil Paramēśwaran Pillai, "are the result of mature perseverance and immature poetic genius." The statement contains a good deal of truth when applied to the works of second rate importance. However, the old type of scholars have not yet given up the mahākāvyas and some of them do continue to produce works of that type. Vatakkumkūr Ŕāja Ŕāja Varma, has written two mahākāvyas, Kaghuvīravijayam, and Kaghavabhyudayam,

Among translations of longer poems the Kumārasambhavam of Professor Řāja Řāja Varma, Krishņavilāsam of Kaviyūr Kāman Nampiyār, Kaghuvam-Translations. śam of Kuntūr Nārayana Mēnon, and Angalasamrajyam* of K. C. Kēsava Pillai deserve special notice. Though not of the $k\bar{a}vya$ type strictly speaking, 'the metre to metre and word for word' translation of the Mahābhāratha by Kunjukuṭṭan Thampurān and the version of Valmīki's Kamayana by Vallathol Narayana Mēnon are two important works. The translation of the Mahābhāratha was completed in two years, a marvellous achievement. The Hālāsya māhāthmya of Mannādiyār, Jnanavasishtam of Varavur Śamu Menon, Bhagavadgītha of Dāmodaran Kartha, Dēvibhāghavatham of Āttukāl Śankara Pillai, and the Thirukkural, of Dewan Bahadur A. Govinda Pillai may be mentioned in passing.

This period is prolific in khandakāvyas, which may be broadly classified into two divisions, one following Sanskrit and the other English models. Khandakāvyas. Kērala Varma himself wrote a khandakāvya, Daivayogam. The works of Changanāśśeri Ravi Varma Kõil Thampuran, Ushakalyanam Bhasha Champu, Kavisabharaññanam and Devisatakam deserve prominent mention. Numerous minor poems followed in rapid succession. Prof. Kāja Kāja Varma's Malayavilāsam shows the influence of English literature. Kuttikunju Thankachi, a daughter of Irayimman Thampi, was a well-known poetess. The works of Venmani Achan Nampūthiri (992-1066) and Venmani Mahan (1019-1068) have been noticed before. Kunju Kuttan Thampuran (1040-1088) was a ready writer and was famous for extempore versification. Even his friendly correspondence was in verse. Panthalathu Kērala

^{*} Its original was written by Professor Kāja Kāja Varma. It deals with the history of the English Supremacy in India. The poet follows Kāļidāsa's Kaghuvamša.

Varma's Mārthāṇdadēvōdayam is a good literary production. Asannamarana chinthasathakam of K. C. Kesava Pillai, and another poem of that name by Mülür S. Padmanabha Panikker won the prizes in a competitive examination in rapid versification. They are praised for naturalness of their sentiment and gracefulness of diction. The Subhashitharathnakaram, a metrical catalogue of wise sayings, is another of Keśava Pillai's works. The works of Oduvil Kunju Krishna Mēnon (1045—1091) have an easy flow and simplicity which are eminently attractive. His Vilāsini is popular and many of his stray verses are oft-quoted. Among the writers of the Kērala Varma period Oravankara Nampūthiri was a talented poet of great originality and power. Some of his devotional pieces are exquisite. The verses of Sīvolli Nampūri also gained great popularity. Kottārathil Sankunni and several others have written khandakavyas. Oduvil Śankarankutty Mēnon is a poet who is untiring in his devotion to the muses. The output is large. What is remarkable in his case is the fact that he has been able to do so much though born blind.

Modern Malayalam poetry is characterised by a new The super-imposition of western civilisation on that of the east has generated new ideas The new school. of taste. But the old models continue to exert their influence. In former days poetical genius devoted itself to the explanation and amplification of the thought of the ancients, though many of the Kerala poets were able to reshape the pictures with considerable originality. Occasionally a Malayalam poet chalked out a new path and indulged in his own rhetorical devices. But the old fundamental laws of literary composition were generally adhered to. The spread of English education extended the bounds of knowledge and generated new angles of vision. At first the number of people who went in for English education formed only a minority. But the new ideas filtered down to the

very base. The evolution of the Malayalam novel attests the influence of the new conditions. That influence was not confined to prose. The arbitrary rules of prosody and poetics which limited the province and prescribed the alignment of genius in stereotyped channels came to be regarded as exerting a prejudicial effect on the expansion of Malayalam literature. The inspiration which proceeded from the monuments of a language which ceased to be a living force many centuries ago was not enough to meet the requirements of an age which was ushered in by the political and academic reformation which came in the wake of the British connection. From this change in the circumstances of the country arose a new school of poets, who, while respecting the old traditions and venerating the great literary works in Sanskrit and Malavalam, recognised, at the same time, the value of western literature and submitted themselves to its potent influence. The wine of western thought thus came to be preserved in the bottles of the east along with oriental thought. There is perhaps no country in the world which presents such a large proportion of literary ability as Travancore does. Malayāļam lends itself freely to profitable use in all the different varieties of composition. Three poets, Mahākavi Ullūr S. Paramēswara Aiyer, Kumāran Asan and Vallathol Narayana Menon, may be regarded as the representatives of the new school.

Mahākavi* Uļļūr is still active in his literary work. From his student days he evinced an uncommon desire for the acquisition of knowledge. The various

departments of learning, languages, history, philosophy, law, politics, archæology and sociology, yielded to his persistent industry. The best part of his life was devoted to the service of government in which he rose to a high place. But official duties never prevented his application to

^{*} The title Mahākavi was conferred on him by H. H. Srī Chithifa Thitunāl Mahārāja.

the service of the muses. His poems, short and long, are read with gusto throughout Kēraļa. His chief works are Umākēraļam, Karņabhūshaṇam, Pingaļa, Bhakthidīpika, Chithraśāla, Thārahāram, Kiraṇāvali and Chaithraprabhāvam. A prominent characteristic of his poetry consists in the successful dilution of learning to satisfy the demand of the average man. The poet sees nature and creation with the eyes of a scholar whose heart responds to the consciousness of the brotherhood of all things, animate and inanimate.

Kumāran Āsān (1046—1099) was a poet of great eminence who compressed into a few years of literary activity a strenuous work which will al-Āśān. ways be remembered. He first came to notice as the author of Vina Pūvu, a lyrical piece which depicts in inimitable fashion the vanity of human wishes. His subsequent works are Nalini, Līla, Chandālabhikshuki, Sītha, Karuṇa, Duravastha, Prarōdanam, and Śrī Buddhacharitham. The main feature of his writings consists in an endeavour to establish the equality of mankind by doing away with the barriers set up by the rigid rules of caste. The outpourings of his heart are marked by a tinge of pessimism brought about by hard social customs. His versification is simple, the deepest thought coming out in unconventional garb. Āśān was a great leader of the Ilavas and identified himself with all movements for the advancement of their interests. All classes of the people of Kēraļa are agreed in regarding him as a great poet of modern times. His untimely death by accidental drowning was a great loss to Malayalam literature. It is worthy of mention that his poetic talents were so greatly appreciated that he was presented with a shawl and a bangle by His Royal Highness the Prince of Wales.

Vaļļathoļ Nārāyaņa Mēnon is a native of Malabar. His translation of Vālmīki's Ŕāmāyaņam has already been

noticed. His great popularity throughout Kerala depends on the exquisite lyrical pieces which enshrine Vallathöt. the greatness of the ideals of ancient Indian civilisation and the sentiments of regenerated nationalism which stir the hearts of the people of India. He culls his themes from the sacred realms of the puranas as well as from the vicissitudes of modern life. According to him the greatness of India is not merely a thing of the past but an orb of light in the dawn of the future. distends with pride at the thought of what his native land Kerala has contributed to the civilisation of India and the world. His efforts for the popularisation of the arts of Kēfala have been crowned with success. His important works are Aniruddhan, Badhiravilapam, Orukathu, Gaņapathy, and Sishyanum Makanum. His shorter lyrics have been collected in the Sahithyamanjari. His poetry is pervaded by an air of optimism. Vallattol is the recipient of may honours from His Highness the Mahārāja of Cochin.

One species of metrical composition in which all these three poets have tried their hand, and tried successfully, is the elegy for which English literature afforded excellent models. The earliest of the Malayāļam elegies, however, was composed by Mr. M. Řāja Řāja Varma Řāja. It is an imitation of Tennyson's In Memorium. The poem is styled Priyavilāpam, the theme being the premature death of prince Aśwathi Thirunāl Mārthānḍa Varma, a talented member of the ruling house. Vilāpam by C. S. Subramoṇyan Pōtti is also a work of merit. The Praíōdanam of Kumāran Aśān and several pieces by Uḷḷūr and Vaḷḷathōl belong to this class.

Parallel to the growth of lyrics and other shorter poems there is also an increasing output of short stories,

essays and prose dramas. This is facilitated by the large number of newspapers and literary maga-Short stories, zines. This began with the Vidyavilasini essays, etc. the Vidyāvinodini, the Bhāshāroshini, the Rasikaranjini and other periodicals. The contributors were mostly from among the ranks of persons who possessed a knowledge of English. Kavanodayam, a magazine specially devoted to the publication of poetical works old and new. and Lekshmi Bavi, intended for the benefit of the women of Kērāla, did good work. The magazines have done much in the cause of research and literary criticism. A fascinating collection of stories is the Aithihyamala by Kottarathil Sankunni, an older writer, a work in which he combined history, tradition and folk-lore all woven into one. Many are the young men and women who are working in this line. Some of them are good in writing prose dramas which are modelled on the works of Moliere, Ibsen, and Bernard Shaw. They are too many for mention. The late Mr. E. V. Krishna Pillai was perhaps the most popular of this class.

The numerous public meetings held in almost all parts of the State, week after week and sometimes day after day, gives an inducement to prominent scholars to put their thoughts before the world in the form of essays and dissertations. The better class of them finds its way to the journals. Even those who are shy of cold print are obliged to contribute their talents to this channel through the importunate demands of publishers. There are also a great many essays intended primarily to be included in books. Many of these are of a high level but time should elapse before their place in literature can be definitely ascertained.

The progress of education in Travancore has been responsible for the compilation of a large number of books on every subject of importance. The start was given by Rāṇi Pārvathi Bhai

more than a hundred years ago. The part played by the Christian Missionary Societies deserves prominent mention. They were the pioneers of printing in Kērala. missionaries made a sustained effort in studying the language of the country and in placing useful knowledge within the reach of the ordinary people. The dictionaries compiled by Gundert, Collins and Bailley have been of great use. So is Garthwaite's Malayalam grammar. The services rendered to the cause of Malayalam literature by the University of Madras have been invaluable. The teaching staff of His Highness the Mahārāja's College at Trivandrum, notably prof. A. R. Kāja Kāja Varma, K. R. Krishņa Pillai and P. K. Nārāyaņa Pillai among others, made valuable contribution by their example and precept. So did Mr. Ullur Parameswara Aiyer. University men applied a new method to the study of Malayalam and contributed a wealth of literary criticism. Some of the best known and the most popular works in Malayalam prose are written by them. Their names are too numerous for mention.

The library movement is giving a fresh impetus to popular instruction. The Sahithya Parishad* which meets once a year is an institution which in Present state. some measure co-ordinates the literary activities in Travancore, Cochin and Malabar by giving suggestions for the improvement of valuable yalam. This is a period of transition. But a judicious commingling of old and new elements to preserve the distinctiveness of the culture of Kērala, taking full advantage at the same time of the progress of knowledge in the world of today, is the most prominent characteristic of literary activity which is pursued by the poets and scholars of Travancore, encouraged by the liberal policy of His Highness the Mahārāja and His Highness's Government.

[·] A literary conference,

The greatness of Kēraļa and its culture is claiming increased attention. History is giving a correct perspective. K. P. Padmanābha Mēnōn's History of Cochin in Malayalam is an original work which serves as a model. Many facts in the history of Travancore are narrated therein. Following the footsteps of his father Shungoonny Menon. the author of the History of Travancore, Padmanabha Menon devoted the best portion of his life to the compilation of a History of Kērala in English. Mr. R. Nārāyaņa Panikkar has incorporated certain new views in his history of Travancore in Malayalam. Books are being published on the past history of communities like the Syrian Christians and the Ilavas. Mr. A. Görala Menon, has explained the philosophy of history in his 'Charithra Thathwam,' and the principles of sociology and economics in his 'Samucayōtkarsham.' Mr. K. M. Panikkar is a prominent writer on a variety of subjects, history and historical novels being the more important.

This chapter has been written with the object of giving a general idea of Malayalam literature. In several cases the names of authors have been mentioned to illustrate schools of thought or types of composition. The names of many living writers have been omitted in view of the scheme of this chapter. Some of them are good posts while others possess great literary ability. united effort is being made by the educated classes who speak Malayalam to foster the growth of its literature irrespective of the fact that they are living in three different political environments. The literary excellence of some of the articles in newspapers and periodicals is remarkable. The late K. Rāmakrishņa Pillai was a bold critic of literary works. Among living men of the older generation, prominent in the press or platform, the names of Messrs. R. Iswara Pillai, M. Kama Varma Thampan, Mallur Gövinda Pillai, Mürköthu Kumāran, K. C. Mammen Mappilay, C. V. Kunjuraman, O. M. Cheriyan, I. C. Chacko

and P. K. Gövinda Pillai are worthy of mention. The last mentioned writes good verse as well. None contributed more learned articles to periodicals, or contributed more to help the growth of literary criticism than the late Mr. P. K. Nārāyana Pillai. Vijāānadīpika, a collection of literary and historical essays by Mahākavi S. Paramēśwara Aiyar, deserves prominent mention. Malayālam literature continues to grow.

Sanskrit and Tamil are also being cultivated. There are several Travancoreans with acknowledged scholarship in Tamil. Mr. T. Lakshmanan Pillai is Sanskrit and Tamil famous as a composer of Tamil songs literatures. and Mr. S. Deśikavināyakam Pillai is well-known as a poet. Sanskrit was the language of culture all through the past in Kērala and a vast body of Sanskrit literature was produced by the native scholars. The names of Kulašēkhara Alwar, Sankaracharya, Līlāsuka, Šakthibhadra, Lakshmīdāsa, Vāsu Bhattathiri, Ravi Varma Kulasekhara and Melputlur Narayana Bhattathiri shed lustre on the pages of the literary history of India. Creative genius in Sanskrit literature continued to manifest itself and find expression in recent times as well. The works of Kēraļa Varma Valiya Kōil Thampuran and Professor A. R. Rajaraja Varma are conspicuous for pleasant diction and sober thought. publication of old works is being encouraged by Government. The Trivandrum Sanskrit Series command the enthusiastic appreciation of all oriental scholars. Presiding over the ninth session of the All-India Oriental Conference, Dr. F. W. Thomas said: "The Library of Sanskrit texts which Travancore has given to the world and which includes important works previously unknown, in many departments of literature, constitutes a sort of epoch in Sanskrit studies,"

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CHAPTER IX.

RELIGION*—HINDUISM.

Travancore is reputed as a Hindu State. The ruling family and the large majority of the subjects are Hindus by religion. Hinduism, as it obtains in General. Travancore, is not different from what it is in the rest of India. The fundamental doctrines of the faith lie scattered among hymns, philosophies and observances. recorded in thousands of books in Sanskrit and the Indian vernaculars, while a considerable portion of it is kept alive by oral tradition. To a superficial observer not accustomed to the ways of Indian thought it appears to be a congeries of notions, beliefs, rituals and superstitions, with doctrines colliding with one another, and forms and ceremonies out of gear with the wealth of philosophy which is claimed for it by its adherents. But amid the many forms of worship there is a fundamental unity, an appreciation of the unity of God, which is not inferior in clearness of conception and moral grandeur to that presented by any other system of religious faith. The human mind works from the seen to the unseen, from manifestations to the prime cause, the Creator, the Protector and the Destroyer of the universe. The truth about Hinduism is that it has never been static. Its dynamic individuality has kept pace with the widening of the human intellect and the advancement of civilisation. The Sanathana Dharma of the Hindus is like "the great banyan tree, whose thousand ramifications, often issuing from apparently lifeless stems, find their way into walls, undermining old buildings, or themselves send

The figures showing the numerical strength of the followers of the several religions are given on p. 386 supra.

down roots which become fixed in the soil and form fresh centres of growth and vitality".*

The beginnings of Hinduism must be sought for in the south more than in the north. But the distance from the valleys of the Indus and the Not mainly Aryan. Ganges, which, according to the earlier European scholars, formed the cradle of Indian civilisation, has prevented a correct appreciation of the contribution of south India to the thought, culture and religious faith of the Hindus. North India, on the other hand. careful attention of western attracted the of language, history, religion and philosophy. The reasons are obvious. The ancient civilisation of India lay hidden under the dust of centuries until the renaissance which was rendered possible by British peace. When the veil was lifted, investigation into the past was conducted in the light of western notions by European orientalists and Indian scholars who were inclined to apply the usual standards of historical criticism in dealing with theological matters. was in Benares that Warren Hastings established the first Sanskrit college in the modern sense of the word. It was in Calcutta that Sir William Jones, Colebrooke and Monier Williams laboured to extend the bounds of oriental learning. It was in the north again that the western branch of the Aryan race looked to find facts which would help them to lay the foundations for the superstructure of the theory of racial propinquity between the different groups of the race. The conclusions of scholars like Max Müller, Mac Donell and Berriedale Keith on points of comparative philology and comparative religion derive their sustenance from the fertile fields of Sanskrit literature. They found the Kamayana, the Mahābhāratha and the Bhagavad Gītha being held in veneration throughout the country and the Brahmans of south India repeating the Gayathri and other manthras

^{*} Thought and life in India, Monier Williams, pp. 98, 99.

which are admittedly of Āryan origin. They therefore arrived at the conclusion that Hinduism evolved from the Śruthīs and Smrithīs of the Indo-Āryans.

But the opposite side of the picture has not failed to attract the attention of scholars in comparatively recent times. Śwāmy Vivēkānanda who united Vivēkānandā's view. in himself a phenomenal knowledge of Hindu Śāstras and Indian history with a command of the principles of modern science and a critical faculty of an exceptionally high order said:— "The people of Northern India are especially grateful to you of the South as the great source to which most of the impulses that are working in India can be traced. The great Bhashyakaras, epochmaking Acharyas, Sankara, Ramanuja and Madhwa, were born in Southern India; Great Sankara to whom every Advaithavadin in the world owes allegiance; great Ramanuja whose heavenly touch converted the down-trodden Pariahs into Alwars; great Madhwa whose leadership was recognised even by the followers of the only Northern Prophet whose power has been felt all over the length and breadth of India—Sri Krishna Chaithanya. Even at the present day it is the South that carries the palm in the glories of Benares. Your renunciation controls the sacred shrines on the farthest peaks of the Himalayas, and what wonder that with the blood of prophets running in your veins, with vour lives blessed by such Acharyas, you are the first and foremost to appreciate and hold on to the message of Bhagavan Sri Ramakrishna". This admission made by the great teacher, himself a man of the north, is of great value.

Recent writers bear out the truth of this observation with a wealth of relevant facts. It has been distinctly recognised that the Atharva Veda bears the unmistakable impress of the religious practices of the pre-Āryan inhabitants of India, the Dasyus

of the Aryans. "Dasyu rites", says P. T. Srinivasa Iyengar, "certainly prevailed throughout India in the south and in the north, before the rise of the Aryan rites. Besides the totem gods the people worshipped numerous spirits, those inhabiting trees, rivers, hills; also local gods, guardian deities of villages, the goddesses guarding the boundaries of villages and the demons that caused diseases." Pre-Aryan life was the same in north India as it was in the south. The finds of Mohenjo-daro and Harappa bear eloquent testimony to the social and religious practices of the older people.* The religion of the Indus people comprised:—

- 1. Worship of the Mother Goddess or Śakthi,
- 2. Worship of a male deity, the ancestor of Siva,
- 3. Worship of animals, natural, semi-human or fabulous,
- 4. Worship of trees in their natural state or of their indwelling spirits,
- 5. Worship of inanimate stones or other objects of *linga* and *yōni* symbols,
- 6. Chrematheism, as illustrated in the worship of the sacred 'incense-burners.'
- 7. Faith in amulets and charms indicative of demonophobia,
- 8. Practice of Yōga.†

Modern Hinduism comprises within it many of these practices. In the Vēdic religion fire-rites were indispensable. The Dravidians, on the other hand, worshipped their gods by offerings of food accompanied by music and dancing which created an atmosphere of ecstacy. Some of the main features of the Agamic cult which is the groundwork of the Hindu rituals of the present day appear to be pre-Aryan. The Aryans ultimately imitated

^{*} Mohenjo-daro and the Indus valley civilization, Sir John Marshall.

[†] Hindu Civilisation, Radha Kumud Mookerji: p. 23.

the practices of the earlier people and borrowed their gods whom they accommodated within their own religion. Sakthi, the Mother Goddess, Siva and Subrahmonya are instances of this adaptation. Nāga worship which secured a place into Hinduism was admittedly an un-Āryan practice. But it plays an important part in modern Hinduism "which", says Ragozin, "has instituted an yearly festival in honour, not of mythical serpents only, but of real live snakes". The conception of Vishnu reclining on the serpent-king Ādi Śēsha and of Śiva wearing serpents as ornaments bear abundant evidence to the wide influence exerted by Nāga worship in the moulding of the Hindu religion as it is now understood.

There is no place anywhere in India where Nāga worship has been more popular than in Kēŕaļa where every aristocratic Hindu family has one or more groves consecrated to snakes and maintained by the due performance of the prescribed ceremonies. The orthodox Nampūthiři Brahmans, the hereditary landed aristocracy, who till recently segregated themselves from even the most insidious agencies of change and profess an unchanging adherence to the Vēdas, observe certain non-Āryan practices with fervent devotion.

On this point of the relative success of the south over the north the opinions of European writers who are able to view the subject from an altitude of detachment are of interest. "In India," says Sir Charles Eliot, "the doctrines of pre-existence and transmigration seem indigenous to the soil and not imported by the Aryan invaders, for, they are not clearly enunciated in the Rig Veda, nor formulated before the time of the Upanishads. The amplification of Hinduism is mainly due to absorption of beliefs prevalent in Indian districts other than the strongholds of ancient Brahmans". Will Durant observes that "in a sense Hinduism represents the triumph of aboriginal Dravidic India over the Aryans of the Vedic age". Mr. P. T. Srinivasa Iyengar points out that when the Aryan cults

migrated to South India the regional gods were identified with the Āŕyan gods similar to them in function, the red god with Subřahmonya, the black god with Vishnu (Krishna), the sea god with Vařuna, the sky god with Indřa and the desert god with Řudřa. Writers from North India now acknowledge the contribution of the South in unmistakable terms. Western scholars like Sir Charles Eliot, Hopkins and Mac Donell accept the opinion that the Dravidian forms of worship modified the Āŕyan in essential particulars.

The Agamic system of worship which is in vogue throughout India is believed to have evolved mainly from the pre-Aryan cults. Anglo-Indian What is Hinduism? officers, charged with the conduct of census operations have delighted in formulating definitions of Hinduism by giving prominence to the rules of exclusion rather than to the root-ideas which constitute the basis of the faith. Even Sir Alfred Lyall could speak of it only as a "tangle of disorderly superstitions and all the collection of rites, worships, beliefs, traditions and mythologies that are sanctioned by the Sacred Books of the Aryans and are propagated by the Brahmin teaching". Sir Heibert Risley describes Hinduism as animism more or less transformed by philosophy, magic tempered by metaphysics. But despite these intellectual apparitions the prominent features of this form of faith as distinguished from others are recognised to be:-

- 1. Faith in the Vēdās.
- 2. Belief in transmigration.
- 3. Faith in the Hindu Trinity and the Avathars.
- 4. Respect for the cow.
- 5. Substantial conformity with the rules regulating caste system.

Hinduism represents a development from the beliefs and practices of the Indus valley civilisation to the complex

of changing aspirations and habits, speculations and forms which are in vogue to-day. There are, however, certain governing conceptions, controlling ideas, deep dynamic links which bind together the different stages and movements. The unity of Hinduism is not one of an unchanging creed or a fixed deposit of doctrine, but is the unity of a continuously changing life. Religion for the Hindu is an experience or attitude of the mind. It is not an idea but a power, not an intellectual proposition but a life's conviction. Religion is consciousness of ultimate reality, not a theory about God.*

The principles and practices of Hinduism are, as pointed out above, the result of a gradual process of assimilation of Arvan and Dravidian ideas. The Evolution of ideas. Brahman priests and scholars enlivened its vitality and regulated its growth. The course of the development of religious ideas is seen in its different stages in the Vedas, the Brahmanas, the Upanishads, the Puranas, the six schools of Indian philosophy and the teachings of the Bhagavad Githa explained and amplified from time to The hymns of the Rig Vēda, one thousand and twenty eight in number, were composed by the poet-seers in praise of the gods. The chief gods were Varuna, Sūrya, Indra, Rudra, Agni and Soma. There were also minor deities. In course of time the gods of the three regions, celestial, atmospheric, and terrestrial, increased in number.

The three gods of the three regions were multiplied into thirty three. Dyn the sky, Prithivi the earth, the eight Vasūs, the eleven Kudrīs, and the twelve Ādithyās. This polytheism gradually led to changes in conception. In course of time different functions came to be assigned to different gods. Sometimes the same power was represented

[•] The Legacy of India, Page 261.

by various names. Thus Mithra, Sūrya, Savitha, Pūshan, Vivaswat and Vishnu connote different aspects of the sun. There were also classes of deities like the Maruths, Rudras and Vasūs. Gods who were once great and powerful fell from their pedestals and a host of minor deities divided among themselves the sovereignty of the universe in different proportions. Varuna was at one time the ruler of the universe according to the Vedas. So was Indra. Rudra assumed prominence and was then dislodged in his turn. The hymns applied to Rudra were made to apply to The Brihaspathi hymn was transferred to Mahādēva. Ganesa who developed from a malevolent deity into a kind and benevolent god. Agni, Yama and the Maruths yielded to Prajapathi who subsequently came to be known Brahma.

The idea of a unifying principle soon evolved itself. "The Velic sage, while contemplating the true significance of Dyu and Prithivi, caught a glimpse of infinity and he called it Aditi, the mother of all the other gods. Aditi is the earliest name invented to express the infinite, not the infinite as the result of a long process of abstract reasoning but the visible infinite, visible by the naked eye, the endless expanse, beyond the earth, beyond the clouds, beyond the sky". * The Hamsavathi Rik says:- "As light He dwells in the luminous sky, as Vasu He dwells in the mid-space, as hotri He exists in the sacrificial altar; as a guest He exists in man; as right He exists everywhere; as supreme entity He exists. He shines in sacrifices, in the sky, in water, in light, in mountain and in truth". The singing of hymns and the offering of sacrifices formed the essentials of worship. The belief in one Supreme Being was thus of very early growth. The Hiranyagarbha hymn, one of the oldest in the Rig Vēda says, "Ekam Sat Viprā

^{*} Max Müller, Rig Veda, Introduction to the Translation.

[†] Rig Vēda, IV, 40, 5.

Bahudhā Vadanti" Rig Veda, V, 10—121, which means that God is one though the sages call him variously.

In course of time Dravidian ideas were engrafted on the Aryan religion and Dravidian gods taken within the fold and worshipped in the same manner Growth of vedic as the Aryan ones. The vedic religion literature. was modified by the beliefs and rituals of the Dravidian south. "The South Indian forms of worship differed from those of the north in the total absence of firerites. Devotion to a personal God was the most important feature of the religion of the Dravidians of India. paufanika writers give to South India the credit of inaugurating the form of religion in which the dominating principle is a personal god interested in human welfare, and devotion to him by prayer and service of various kinds. fact this bhakti is said to have originated in the Dravida country, passing from there into the Maratha country and from there ultimately to the Gangetic Doab round the region of Muttra, overspreading the whole of Hindustan from that as the Centre".*

Sir Charles Eliot and others are of the positive opinion that the greatest deities of Hinduism, Siva, Krishna, Rāma, Durga and some of its most essential doctrines are either totally unknown to the Veda or obscurely adumbrated in it. † The Āryans of the north, though they absorbed much of what was Dravidian, gave the religious teachings of the south a new setting and transfused them to such an extent that for centuries the authority of the Śruthīs, Smřithīs and the Purāṇās have been acknowledged by all Hindus, those of the south as well as those of the north.

The theory of the immortality of the soul, its transmigration and reincarnation is the bedrock of the religious

Dr. S. Krishnaswāmi Iyengār's article in the Cultural Heritage of India, Srī Kāmakrishna Centenary Memorial, p. 78.

[†] Hinduism and Buddhism by Sir Charles Eliot, 1921, Vol. I. p. 15.

belief of the Hindus. "With reincarnation", said Dr. Annie Besant, "man is a dignified immortal being evolving towards a divinely glorious end; without it he is a tossing straw on the stream of chance circumstances, irresponsible for his character, for his actions and for his destiny. With it, he may look forward with fearless hope, however low in the scale of evolution he may be, for, he is on the ladder to divinity and his climbing to its summit is only a question of time. Without it he has no reasonable ground of assurance as to progress in the future nor indeed any reasonable ground of assurance of future at all". The dropping of the grosser material elements was, therefore, a necessary step in the elevation of the soul to the higher plains of existence. To accomplish this a moral life, reassured and ennobled by faith in a supreme power governing the universe, was essential. This explains the perception of theistic truth in the Vedas and their gradual development amidst the cold. unimpassioned, philosophical reflection of the Upanishads. "Truth alone conquers", say the Upanishads, "not falsehood". It was deemed necessary for the realisation of the Athman or the true self. "Alone man is born; alone he dies. alone he reaps the fruit of good and evil done by him. Righteousness being violated destroys; righteousness being preserved, preserves. Therefore righteousness must not be violated lest violated righteousness destroy us. The only friend that follows a man even after death is righteousness; for, everything else is lost at the same time the body perishes " *.

This teaching is explained and amplified in the Dharma Śāstrās and Purānās. The pursuit after truth, it was recognised, must be a wise pursuit with the help of the resources of reason strengthened by the acquisition of true knowledge. At the same time it was urged that it is through the driving power of Brahman that our minds, our vital powers, our sensory and motor organs are moved into

^{*} Manu.

activity; our eyes cannot reach him. "He is different from all that is known and unknown and it is therefore impossible to describe his nature. But though our words cannot describe him, yet the power of speaking is derived from him; though our minds cannot know him, yet the power of thought is derived from him; though our eyes cannot see him, yet it is through his vision that the eyes can operate; though our ears cannot hear him, yet it is through him that the organ of the ear can realise itself in hearing.*

The idea of the individual human soul being identical with the universal soul is a very ancient one in India. The progress of thought from the Vedas to the Upanishads is described by Romesh Chandra Dutt in these words:-"In the Vedic hymns man fears God, in the Brahmanas man subdues the God and fears God, in the Upanishads man ignores God and becomes God". But this is not a correct view. The following observations of Mahā Mahōpādhyāya Dr. Ganganāth Jha are more authoritative and are warranted by the texts themselves. "The Upanishads taught various meditations and prayers to God with attributes. The embodied soul was treated as subordinate to God and various injunctions were laid down in the Upanishads enjoining him to worship the supreme Brahman as imperishable Antaryāmi or inner guide and controller of the whole universe. The conception of a personal God for devotion and worship in the Upanishads, was rather distinguished from that of the theists.....In the Upanishads, we do not find any conflict between theology and metaphysics. they are found to exist side by side with the result that religion has always formed a part and parcel of philosophy from the earliest times down to this day ".† The Vedas, Brahmanas, Aranyakas and Upanishads taken together are known as Śruthis, revelations. These should be

^{*} Das Gupta, Indian Idealism, pp. 28 and 29.

[†] Intelligent Man's Guide to Indian Philosophy, pp. 72, 73.

distinguished from the Smrthis and the Puranas which are later in time and human in their origin.

The recognition of common characteristics in the several gods marked a definite stage in the progress of religious thought. Indra, god of the heavens, Progress towards Agni, god of the earth, are all of them quasi-monotheism. associated with potential fire. Agni was recognised as a mysterious deity; for, as a sun he lights the earth and gives life, sustenance, children and wealth; as lightning he destroys; like Indra he gives victory; like Varuna he releases the bonds of sin. The similitude led to the forgetting of the distinctive marks which established the identity of each of the deities "aided by the likeness or similarity of attributes in Indra, Savitha, Agni or other gods, many of which were virtually the same under a different designation. With the exception of some of the older divinities whose forms, as they are less complex, retain throughout the simplicity of their primitive character, few gods escaped this adoration which tended to make them all universally supreme, each being endowed with all the attributes of the god-head. In other words, "every god became any god "*. Most of the later hymns of the Rig Vēda Samhitha were composed under the influence of the tendency to a quasi-monotheism, which eventually resulted in philosophical pantheism.

Attempts were made from time to time to discover the prime cause, the primordial principle of the universe.

It was believed that those who propitiated the Supreme could obtain immortality. The chanting of hymns, the offering of sacrifices and the performance of rites and ordeals were not inconsistent with the philosophical opinion of the times. The value of thought depended on the logic of the argument and the depth of

^{*} The Religions of India, by Hopkins.

inspired wisdom from which it emanated. However, the sacerdotal class succeeded in seizing for themselves opportunities of self-aggrandisement. The vedic religion lost its primeval simplicity by the agglomoration of ritualistic excesses. The spirit yielded to soulless forms. The inequality of the castes and the exclusiveness of the priesthood were a bar to progress. The old order became the target of attack. So great was the latitude of thought allowed in India that the Chārvākās, Lokāyathās and other agnostic schools of materialism who questioned the very existence of god plied their vocation with impunity. The stir was not confined to Bharathavarsha. About the same time the question of human life-the life before and life afterwas agitating the thoughtful minds in all the civilised countries. Pygthagoras in Greece, Zaratusa in Persia, and Kun P'u Zo in China were all of them engaged in finding out solutions.

The movement derived great assistance from philosophy. The school of Kapilacharva addressed itself to the intellect and developed the Sankhya philosophy. It was the philosophy of realism; the ultimate authority being not the Vedas but individual experience. Dualistic in its conception, it distinguished between Prakrthi and Purusha-Nature and the individualised mind, which latter is the result of consciousness. Nature exists for the attainment of knowledge, the paths being a virtuous life and an equanimity of temper. The Sankhya prescribed no fasts, permitted no sacrifices; nor did it counsel the cultivation of faith in god through doctrinal excellences or formality of worship. Instead of emphasising the value of penance it permitted a reasonable epicurianism. So great was the fascination of the new teaching that its principles found their way into the great literary works like the Mahabhāratha. Pathanjali tried to blend the idea of a reasoned philosophy with the conception of a Supreme God. This was intended to cure the agnosticism or godlessness which came in the wake of the teachings of Kapila. The heart craved more and more for emotional satisfaction based on ethical excellences. Then arose two teachers who preached the words of purity, honesty and love. These notions are traceable to the Upanishads, but it was in the seventh century B. C. that they solidified into a system.

The spirit of the teachings of the Upanishads was in the air. The methods to pursue meditation, a high moral standard, and the practice of Brahmacharya Jainism and prescribed by the early sages of the Upani-Buddhism. shads were still in vogue. "Throughout the vedic literature consisting of the Samhitas, the Brahmanas and the Upanishads, we find two currents of thought opposed to each other running parallel, sometimes the one becoming dominant, sometimes the other, one enjoining animal sacrifice in the Yajñas, (sacrifices), and the other condemning it. Hence it is obvious that from the very earliest period of Hindu thought, ahimsā dharma and its opposite have been struggling for domination".* The vedic rites with all their prescribed austerities and animal sacrifices had ceased to function effectively. A new plan had to be devised, a new method had to be prescribed. The time was ripe for reform and the men, of whom the world stood in need, did come. In Mahavira (the Jaina) and Gauthama (the Buddha) the thought and wisdom of the ages, the spirit of self sacrifice, with supreme regard to personal virtue and an abiding love of humanity and of creation, manifested themselves to an extent unprecedented in the annals of civilisation. Both the teachers were Kshatriyas. Their aristocratic connections gave them facilities to spread their respective

"The two movements had many points of similarity. Both were revolts not against Hinduism in the wider sense,

faiths. Both taught their doctrines in the popular languages.

^{*} The cultural Heritage of India, Rāmākrishna Centenary Memorial, Vol. I, p. 185 and 186.

but against the traditional polytheism and the spiritual claims of the Hindu priesthood. Both started from the allied doctrines of Karma and re-birth. Both regarded existence as in itself an evil and both offered a path leading ultimately to escape". * Their teachings were practical rather than philosophical. Jainism and Buddhism were open to converts from all classes and castes. In both the systems a disciplined life and good acts were so strongly emphasised that the idea of a personal god was a matter of little concern. The personal example of the founders, service, sacrifice and love became the source of perennial inspiration. cetics and Buddhist monks travelled far and wide to preach the lessons of liberation. The times were eminently favourable. The elaborate ceremonies of the Brahmanical religion and the inequalities of the caste system had turned large numbers of people away from the established religion.

The success of Jainism and Buddhism wrought important changes in south India. The people of Kērala accepted their teachings The new teachers exercised considerable influence through the ruling princes. Disgusted with the degradation of what passed for Brahmanism, the people transferred their allegiance to the new forms of faith. The exponents of the creed were the pillars of learning and culture. The best works in the Tamil language in the early centuries of the Christian era were those written by Jain ascetics and Buddhist monks. In the fifth century the Jains were so influential that they were able to establish a Tamil academy with the support of the Pandyan kings who ruled in Madura. During that period there appears to have been considerable rivalry between Jainism and Buddhism, each attempting to gain predominance at the expense of its rival. While in north India Jainism found little favour at the hands of the more powerful monarchs, in the south

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^{*} A short History of India, W. H. Moreland and Atul Chandra Chaterjee, p. 40,

it formed the religion of the people at one time or other of the Chōla, Pāndya, Pallava and Chālūkya kings. The doctrines of Jainism and Buddhism, though divorced from theism, exerted a profound influence over the practices of Hinduism and paved the way to its transformation into a new form of religious faith.

The expansion of Buddhism, however, led to great changes in the doctrines enunciated by its great founder.

The idea of a personal god was substituted The influence of for the impersonal abstraction of morality the new Buddhism. and virtue. The growth of the Mahayana School transformed the very substance of the Buddhistic creed. The monks endeavoured to gain the adherence of the masses by absorbing into their faith several Hindu gods and goddesses. The idea of Nirvāņa was virtually abandoned. People were told that good actions in this life would be rewarded with a future birth as a god. Such was the irony of fate that Gauthama Buddha who condemned the worship of a personal god was himself deified and worshipped. India was strewn with his images. The new Buddhism became more popular than the older one. It caught the imagination of the people by its impressive rituals and gorgeous ceremonies, its image worship, car processions and its humanitarian work. Finally, Brahmanism absorbed Buddhism and thus got itself transformed into modern Hinduism, practically a new religion. Hindu teachers borrowed the weapons of the Buddhists and used them against their owners. Gods and goddesses were extolled in the Puranas and temples were dedicated to them in increasing numbers. Matters relating to the construction of temples, the installation of images and the rites and ceremonies to be performed there were explained in the Agamas. So great was the veneration in which the Agamas were held that they were believed to have been promulgated by Isvara Himself. Vaishnavites and Saivites had each their own Agamas.

They seem to have become authoritative during the period of Pallava dominance which gave considerable help to the spread of the Bhakthi cults. It is in that period that the Thēvāram and Thiruvāśakam of the Śaivās and the Prabandha literature of the Vaishnavite Āļwārs obtained their currency.* The attractive practices of image worship and car processions became the regular features of Hindu religious life. The temples also served as centres of popular instruction and medical assistance.

"Bhakthi alone leads the individual self to the Lord; Bhakthi alone makes the finite self see the Lord and by means of Bhakthi alone the Absolute is The Bhakthi bound in a living relation to the self". cults This merit of Bhakthi was realised in India in times anterior to the advent of the Aryans. roots of the Bhakthi cult lay deep in the Dravidian South. It made its echoes in the writings of the ancient Sangam poets and grew slowly but steadily, giving an impetus to its expansion throughout India and helping the course of the systematisation of its principles in North and Central India. "The school of Bhakthas in the Tamil land elaborated and worked it up with features characteristic of Tamil culture and sent it back in a more realistic reflex wave which swept over the whole land of India".

The new school became popular. Bhakthi denoted a comprehensive faith in the Lord of the Universe. To the true devotee life is not an end in itself but only a path to eternal happiness, perpetual blessedness freed from the endless succession in the unknown regions of transmigration. The Mimāmsaka system of sacrifices forfeited popular favour. The Yōgic practices of study, meditation and asceticism were not acceptable except to the few. What the ordinary man desired was to obtain the grace of heaven without sacrificing all that was attractive and enjoyable in this

^{*}The Cultural Heritage of India, Vol. III, pp. 78 & 79.

world. Intelligence gravitated towards the Supreme Being, the embodiment of love and mercy, who could be approached through a stainless life of good deeds and unswerving piety. Even the logic of the schools of philosophy favoured the growth of the idea which received a fresh impetus from the methods of Jain and Buddhist worship.

The Bhakthi movement was fed through two parallel channels, by the Vaishnavites and the Saivites. Each section regarded its own deity as the Supreme Lord: at first there was no rivalry between the Vishau and the Siva cults. Some of the earlier kings and saints were claimed by both the sects alike as their own. Siva, however, was at first more popular in the south. The teachings of the Śaiva saints, the Nayanars, were set to advantage by their personal example of selfless piety. The mass of Saivite writings increased in volume. Learned men set themselves to the task of formulating a complete philosophical system for their The aspects of Siva and the nature of the thathvas bear the marks in some measure of the Sankhya philosophy. The Satha Rudrīva hymn in the Vēdās is in praise of Siva. Penance is one of the prescribed methods of devotion. Initiation by a guru is an important pre-requisite. The conception of Siva as Dakshināmūrthi is based on the realisation of the importance of religious instruction received from the guru. Śakthi is the female complement of Śiva assuming numerous forms. The votaries of Siva claim for the Saiva Agamas an authority which is not inferior to that of the Vēdās themselves, as the former also are the "Word of God". Devotion is not an end in itself but only a means of realisation by casting away desires which are the offspring of ignorance. Release from the bondage of recurring lives is to be obtained by good conduct, bhakthi and meditation. The Śivāgamās, no less than the Upanishads, have provided the basis for every shade of philosophic thought from monism to pluralism, idealism to realism. Throughout there

is the insistence on knowledge, the insistence characteristic of the best Hindu thought.

Meanwhile, Vaishnavism also expanded on parallel The theory of incarnation played an important part in the development of its ideas. The Lord Vaishnavism. Vishnu being the Preserver of the Universe interests himself in the preservation and protection of Dharma and Virtue so that, when mankind becomes degraded and vice becomes rampant, the Almighty assumes concrete forms and descends to the earth. Incarnations are of three kinds: the Avēśa, the Amśa and the Avathāra. Avesa is only a partial incarnation; Amsa is a manifestation of a certain portion of divine power; Avathara is a complete incarnation. The Avathars typify the different stages in the evolution of man. Rama and Krishna are the incarnations of Vishnu which are most extensively worshipped throughout India. Their deeds have been woven into the frame-work of Hindu society. "The lowest and the most degraded characters become in one second saints in their command. They are the teachers of all teachers. The highest manifestations of God through man".

The Avathārs are as useful to the philosopher as they are to the ignorant or the poorly informed. "Fools deride me who have assumed form without knowing my real nature, the Lord of the Universe", says Śrī Krishna in the Bhagavad Gītha. "When a huge tidal wave comes", says Bhagavān Śrī Kāmakrishna, "all the little brooks and ditches become full to the brim without any effort or consciousness on their own part; so when an incarnation comes, a tidal wave of spirituality breaks upon the world and people feel spirituality almost full in the air". The lesson of true selfless bhakthi is illustrated in the Rāmāvana by the place given to Hanumān, who is worshipped along with Kāma and Sītha. The Gōpīs of Brindāban who worshipped Krishna in blind ecstacy and obtained complete

identification with the Lord also illustrate the power of bhakthi. "Worship the bhaktha and you worship God" is a noble idea in Hinduism; God manifests himself in many forms. The worship of Varahamūrthi in the form of a boar, of Narasimhamūrthi in the form of a man-lion, of Hanumān in the form of a monkey, of Garuda as a kite, and Adisesha as a serpent, may be justified, provided the spirit of devotion is genuine. It must, however, be remembered that this polytheism is pantheism viewed from another stand-point.

The Vaishnava saints were known as Alwars and the teachers as Acharyas. Hinduism profited considerably through the exertions of Saivites and Vai-Progress of ideas. shnavites alike. The rituals of Saivaism and Vaishnavism were such as commanded the approval of the Agamas. The principle of Ahimsa once generated by Jainism and Buddhism gathered strength in the inherent kindliness of human nature which began to assert itself and assume a definite form in the realm of Hindu religious practices which hitherto had been to some extent "besmeared with the blood of animal sacrifices." At the same time a more rational explanation of the mystery of life and death became necessary. Dogmas failed to satisfy the curiosity of the thoughtful as well as the common run of mankind. Their logic and principle were beyond the common understanding. The Darsanas or the six schools of Indian philosophy failed to offer consolation to the bulk of humanity. The very teachers entertained doubts regarding the principles which they sought to expound. The Smrthis, both the Grihya Süthras and the Dharma Süthras, emphasised the importance of sacraments. They derived their sanction from the Vēdās, Brāhmanās and Upanishads. The Puranas which dealt with the personalities of gods contributed a large share to the development of worship in temple by emphasising the nature of the Thrimurthis. The common people

contended themselves by offering prayers in the temples as well as in their homes in a routine of monotony relieved by fasts and pilgrimages. The pious aspired for heaven, where they hoped to continue their independent existence in the plenitude of comfort and pleasure. The learned pursued with eagerness the path of meditation which would enable the disembodied soul—Āthman—to enter into an indissoluble unity with Brahman. The Vēdic rites suffered in importance. The Chāndōgya Upanishad makes Nārada say "I know the Rig Vēda, Yajur and Sāma Vēda, but I do not know the self", and the same idea is expressed in the Mundaka.

The objective being as important as the subjective in the interests of the large majority, attempts were made from time to time to create a system in which The Bhagavad the concrete might rise step by step. An Githa. authoritative statement of doctrines was available in the Bhagavad Gītha, the song celestial attributed to the Lord Krishna himself. Its message of deliverance was simple. While only the rich could please the gods by sacrifice and only the cultured could pursue the way of knowledge, the Githa taught a method which was within the reach of all, the performance of duty coupled with devotion. It contained the philosophy of Hinduism in its various aspects. The Bhagavad Gītha is an exposition of the principle of self-sacrifice. Every action is an offering to Krishna. Let the offering be anything, leaf, flower, fruit or water; but if there is devotion it would be accepted. The devotees are divided into four classes; Arthas, Jugmasus. Artharthis and Jnanis. Of these the last, the Jnanis, are the most highly developed. 'Do thou who has been born a man in this transient and joyless world of men, make me thine object of devotion. So shalt thou come to me'.* Persons are not wanting who question the immanence of Krishna and the divine authority for his commandments. To them

^{* 9.33.34.}

who are incapable of abstract thought and are, therefore, obliged to seek the help of anthropomorphism, the Githa furnishes an authoritative exposition. "Krishna often substitutes his own personality in the Gita for the Supreme Being as an object of love and devotion. Now what is meant by the term 'Me' when Krishna asks us to worship him in place of the Supreme Being? The answer to this is given by Krishna himself in the ninth chapter where he defines himself the 'Me' whom we are to worship and know. Krishna there does not mean a particular pet godling called the fondled god-son of mother Yesoda located in a particular place as a separate person whom we approach turning our backs to all other places, but he means the all-pervading Supreme Self (Athman) in which the worshipper as well as all his fellow-creatures live and move and have their being."t In him the higher and lower natures, the para and the apara combine. Without attributes he is Brahman. With them he is Īsvara. The former, the Absolute manifest, is understood only by contemplation; the latter by genuine and sustained piety. Emancipation from the endless tale of births and deaths and transmigration of the soul is the goal. "The conception of emancipation or liberation in the Gita is positive unlike that of the Buddhists whose conception is negative. The word for emancipation in Buddhist literature is Nirvana which means an entry into an indefinite abyss of void (shunya). The state of emancipation in the Gita, on the other hand, is positive and it means perfect peace, the calm of Brahman and endless and absolute pleasure in contact with the Absolute. It also means a release from evil. It is a place from which there is no return or re-birth. embodied one is freed from birth, death, decay and pain and. attains the immortal."* It was not the gospel of a missionary

[†] M. C. Pandya, Intelligent Man's Guide to Indian Philosophy, p. 142.

[•] Do. Do. Do. p. 163.

movement. It addressed no particular sect, established no separate school, but "opened the way to all the winds that blew." The GItha sympathised with all forms of worship and was therefore well-fitted for the task of interpreting the spirit of Hinduism. "The Gita appeals to us not only by its force of thought and majesty of vision but also by emotion."* For at least 2,500 years the Githa has maintained its position of authority in the sacred literature of the Hindus. It is important to note that this 'divine song of songs' does not pretend to have effected any reform in the religious faith. On the other hand, it merely culled the teachings of the Vēlas, the Brāhmaṇas and the Upanishads. "The Upanishads are the cows, Krishna the milker, Arjuna the calf and the nectar-like Gita the milk."

But even the Bhagavad Githa failed to give a quietus to doctrinal differences. Heresies and schisms again began

to disfigure the religious life of India. The Sankara unravelling of the principles of Hinduism and Advaitha Philosophy. from the tangle of authority, superstition and practice was the work of a succession of great men with extraordinary erudition and profound piety. Among them were Jnana Sambandhar and Manikkavāchakar in the Tamil country. Sankarāchārya, the greatest commentator of the Vēdas, though born in Kēraļa, was in some measure their successor. Born in Kaladi, a small village on the banks of the Periyar, and bred up in the orthodox traditions of the Namputhiri household. Sankara left Kerala while still young and was privileged to sit at the feet of Govindacharya on the banks of the Narmada. He wandered throughout India and saw the great sanctuaries of faith and the centres of learning. He saw that the Hinduism of the day was tainted with vicious doctrines and disgusting formalities.

^{*} Radhakrishna, Indian Philosophy, Vol. I, p. 522.

The Sruthis, that is the Vedas and the Upanishads, were still held to be of ultimate authority. Next to them were the Smrthis, the Puranas and the Agamas. But the intricacies of Than hric worship and the deterioration of spirituality in priests made religion barren of results. Śākthās, Bhairavās, Gaņapatyās and Kāpālikās indulged in their various practices, straining the sacred texts to maintain the cherished forms of worship and protect their own interests. Śankara resolved to stamp out of India the agnosticism of Buddha as well as the atheism of the Sankhya Philosophy. The adherents of each creed vigorously activities. But Sankara's sincerity of pursued their purpose, supreme faith in god, deep learning and prodigious proficiency in dialectics carried everything before it. The system of religious faith expounded by him found ready acceptance in all parts of the country. The system is known as Advaithism and is regarded as the greatest contribution to Indian philosophy and the science of religion. Its merit lies in the fact that while it advocated the oneness of the individual soul with Brahman, the all-pervading cosmic force, it also permitted the worship of god in the different forms clothed with distinct attributes. Vedanthism is the name by which the teachings of Śankara are known in theology and philosophy. The rootideas of the system may be traced far back to the Upanishads. The Upanishads endeavoured to discover the true nature of the phenomenal word but looked far beyond to the Athman, 'the supreme self and Inner soul which is within all and which rules them from within '. The oldest Upanishad recognised only one supreme soul which alone existed and created the universe, and as Athman it entered the universe created by it. Again, 'the only reality in this universe from a philosophic point of view is the Supreme Being called Brahman and Athman. There is an organic unity of the whole which is ever maintained by the miraculous power of the Supreme Being. The whole of the universe consisting of the innumerable inanimate objects of nature as well as the migrating souls is comprehended within, the Absolute having their essential being within the latter by an organic unity which never allows the universe any independent existence apart from Brahman or the Supreme Being. Neither the objects of nature nor the migrating souls can exist or perform their functions on their own account as detached from the Supreme Being, who as a matter of fact controls the universe from within by immutable laws, preserving a synthetic unity of the cosmos or the universe as a whole in all its three states of origination, preservation and destruction. This cardinal doctrinal unity is known as Advaitha or non-dual monism ".* "While the followers of Vaishnavism, Śakthaism, and Śaivaism, etc., were quarrelling with one another, Sankara lifted up those popular faiths from out of the dust of mere polemics into the lucid atmosphere of eternal truth ".

Whatever is, is in reality one; there truly exists only one universal being called Brahman or Paramathman, the highest self. It is without form and with-Its principles. out attributes. But in association with Mava (illusion) Brahman is enabled to project the appearance of this world in the same way as a magician is enabled by his incomprehensible magical power to produce illusory of animate and inanimate beings. appearances material cause of the world is Brahman in so far as it is associated with Maya. In this latter quality Brahman is more properly called Iśvara, the Lord. In all the apparently individual forms of existence the one indivisible Brahman is present, but, owing to the particular adjuncts into which Māya has specialised itself, it appears to be broken up—it is broken up, as it were—into a multiplicity of sentient principles, the so-called jīvās (individual or personal

Intelligent Man's Guide to Indian Philosophy by M. C. Pandya, pp. 64-65.

soul). What is real in each jiva is only the universal Brahman itself; the whole aggregate of individualising bodily organs and mental functions, which in our ordinary experience separate and distinguish one jīva from another, is the offspring of Maya and as such unreal. In this conception karma, though meritorious, does not lead to final release: for even the most meritorious work necessarily leads to new forms of embodied existence. Jnanam contemplates Brahman with or without attributes. At the same time Brahman possesses the power to produce unreal appearances. Exercising that power "Brahman is Iśvara, the ruler, the creator, preserver and destroyer of the world, all-knowing, all-powerful, merciful, just, holy, the friend and saviour of finite souls. The pursuit of the former path, i.e., the seeking after Brahman with attributes, leads to the lower Brahman only, while the latter teaches the student that there is no difference between his true self and the highest self. Thus advaithism crowns the edifice of religious faith."*

The teachings of Śankara are thus explained by an American writer:—

"But what is God? Just as there are two selves—the ego and āthman—and two worlds—the phenomenal and the noumenal—so there are two deities: an īśvara or creator worshipped by the people through the patterns of space, cause, time and change and a Brahman or Pure Being worshipped by that philosophical piety which seeks and finds, behind all separate things and selves, one universal reality, unchanging amid all changes, indivisible amid all divisions, eternal despite all vicissitudes of form, all birth and death. Polytheism, even theism, belongs to the world of Māya and Avidya; they are forms of worship that correspond to the forms of perception and thought; they are as necessary to

^{*} Thibaut's Vēdānta Sutras, Introduction. C. N. Krishnaswāmi Aiyar, Sankara, his life and times. Rādhākrishnan's Indian Philosophy. Swāmi Vivēkānanda's Speeches.

our moral life as space, time and cause are necessary to our intellectual life, but they have no absolute validity or objective truth"*

Again, he says: --

"The philosopher, though he may worship in every temple and bow to every God, will pass beyond these forgivable forms of popular faith; feeling the illusoriness of plurality, and the monistic unity of all things, he will adore, as the Supreme Being, Being itself—indescribable, limitless, spaceless, timeless, causeless, changeless Being, the source and substance of all reality."

This attempt towards the reconciliation of conflicting systems of faith met with remarkable success. Sankara also reformed the morals and manners of the various sects and sections of orthodox Hinduism. He preached kindness to all living things, the importance of truth, purity of life, restraint of the senses and love to God and to the Guru, while confirming the worship of the deities peculiar to each sect. At the same time he taught the methods of realising the philosophical conception of the universal god. mission was like that of the Buddha to free Indo-Āryan religion from the superstitious abuses which had accumulated round it and to propound a new philosophical synthesis of all the spiritual wisdom of Hinduism. But while the Buddhā's doctrines were agnostic, Sankara's religious teaching was essentially pantheistic and his philosophy set forth a rationalistic theory of the first cause based upon the teaching of the Upanishads and the Bhagavad Githa. † Its breadth of vision and respect for all forms of faith is thus expressed by Bhattacharya.

"Toleration is to Advaitha Vēdānta a religion in itself; no one who realises what any religion is to its votary is nothing outside the religion and is itself as sacred to others as the religion is sacred to him. While an

^{*} Will Durant. The Story of Civilisation, Vol. II, pp. 548 & 549.

[†] E. B. Havell. A study of Indo-A'yan Civilisation.

individual owes special allegiance to his own religion or svadharma, which chooses him rather than is chosen by him, he feels that the religion of others is not only sacred to them but to him also. This in fact is the practical aspect of the Advaithic view of all individual selves being the one self". This is the creed of Hinduism correctly understood.

Nearly four centuries after Śankara came Kāmānuja. He was a great devotee of Vishņu. Like Śankara he travelled through the whole of India visiting Malabar and Travancore, and pursuing his avocation of preaching his faith in such remote places as Badrināth and Śrīnagar. On his return to Śrīrangam he was persecuted by the Kulöthunga Chōļa, the reigning king, at the instigation of the Śaivites who saw in the spread of Vaishṇavism a great danger to their own creed. Kāmānuja thereupon fled to Mysore where he lived and preached for several years until he returned to his favourite seat Ślīrangam after the death of Kulöthunga.

Kāmānuja was also a Vēdānthist, but his system differs from the Advaitha system of Sankara and is called Visishtādvaitha. He agreed with Sankara in his view of the all-pervading, all-powerful, all-knowing, all-merciful god, but maintained that the Brahman comprises in itself distinct elements of plurality. The world with its variety of material forms of existence and individual soul is not unreal maya but a real part of Brahman-nature-the body investing the unreal self. The Brahman of Sankara is in itself impersonal. It becomes personal god only through its association with maya or the unreal. Ramanuja's Brahman, on the other hand, is essentially a personal god, the All-powerful, and ruler of the real world, permeated and animated by his spirit. The release from Samsara means, according to Sankara, absolute merging of the individual soul in Brahman due to the dismissal of the erroneous notion that the soul is distinct from Brahman.

According to Rāmānuja it only means the soul's passing from the troubles of earthly life into a kind of heaven or paradise where it ever remains in undisturbed personal bliss.

The third great teacher of the Vēdantha School was Madhwacharva. He was born more than a hundred years after the death of Kamanuia. Madhwa Śrī Madhwa. was as good in rituals as he was proficient in higher philosophy. A personal god is the most prominent idea in the system of his teaching. According to him "Hari (Vishnu) is supreme; the world is real; separateness of paramathman and jīvathman is true; the individual souls are infinitely graded as superior and inferior and are dependent on God; liberation is self-realisation consisting in the enjoyment of such bliss as remains latent in the soul. Pure bhakthi (devotion) is a means to this end. Perception, inference and testimony are the sources of knowledge mundane and heavenly. Hari (Vishnu) is noble in the entirety of the Vedas and in the Vedas alone". Madhwa. however, was not opposed to Saivaism as Kāmānuja was. He differed from both Śankara and Kamanuja in certain essentials. From Sankara he differed in maintaining that individual souls are different from Brahman, affirming that they could never be absorbed into Brahman. He was also against the principle of maya. Madhwa like Kamanuja says that the world is real and not illusory, but concedes that illusion might be the result of misapprehension due to an incorrect perception or wrong experience.

Hindus in South India follow the teaching of one or the other of these three great Āchāryās. Not only is there no real antagonism between the three schools but the points of similarity being greater than those of difference, they have all of them together contributed to create a cosmopolitan outlook and strengthen the idea of a personal god with attributes,

omniscient and omnipotent, the impersonation of Sac'hidananda, Knowledge absolute, Intelligence absolute, Bliss absolute. It is conceived that "he whom the Saivas worship as Siva, the Velantists as Brahman, the Buddhas as Buddha, the Nyāyakās as Kartha, the Jainās as Arha, the Mimamsakas as Karma is the same power which the Vaishnavites worship as Keśava or Vishnu". The idea of separate gods grows and merges into that of the one universal being irrespective of the attributes of sex or even of It is an idea which is as old as the Vedas. In the Purushasüktha hymn the one embodied spirit is called Purusha and is said to be "everything, whatever is, has been and shall be." This teaching is continued in the Chāndōgya Upanishad "Ēkam ēva advithīyam", which means there is but one being, no second. This principle is affirmed in the sacred books of India and is happily expressed by Kālidāsa :-

> In these three persons the one God was shown Each first in place, each last—not one alone; Of Brahma, Vishņu, Śiva each may be First, second, third, among the blessed Three.

Śaivaism and Vaishņavism constitute, so to speak, the very warp and woof of the later Hindu religion and it is possible to be a worshipper of Śiva or Vishņu without being a sectarian.* The conception of Harihara as the combination of Vishņu and Śiva, that of Śiva and Devi as Ardhanārīśvara and that of the genesis of Brahma the creator from the navel of Vishņu, prove beyond a doubt that Hinduism is not a fighting ground of all gods against all.

In the Linga Purāna the origin of Brahma and Vishņu is traced to Šiva. Brahma is described as being born from the navel of Vishņu (Mahābhāratha). Šiva and Vishņu are likewise said to have sprung from Brahma's forehead. In the Śānthi Parva Vishņu (or Krishņa) says "I am the soul of all the worlds. It was myself whom I formerly worshipped

^{*} Monier Williams: Thought & Life of India, p. 60.

as Rudra. If I were not to worship the boon-bestowing Siva, no one would worship myself. He who knows him knows me; he who loves him loves me ".*

The Thrimurthis are manifestations of the three gunas, sathva, rajas and thamas, the idea being that when the universal spirit is dominated by sathva guna he is Vishnu, the Preserver, when dominated by thamas (indifference) he is Siva the Destroyer. The Kurma Puiana says:-"For the purpose of delivering the vedas and creating the universe, he united himself to the quality of impurity and appeared as the fourfaced Brahma; to preserve, likewise, these worlds, he has combined himself with the quality of purity, and assumed the form of Vishnu; and at the end of time will that Supreme Being, uniting himself to the quality of darkness, under the character of Rudra, destroy this universe. Thus there is but one omnipotent God, who, though devoid of affection and quality, yet invests himself with the three qualities, and appears under three forms for the purposes of creation, preservation and destruction. At first he manifested himself as Hiranyagarbha, always existing, the first God, unproduced, eternal, of nature incomprehensible; Brahma, the Lord of created beings, and hence named Prajapathi; the greatest amongst the Gods, and hence called Mahadeva; the Supreme Lord, and hence denominated Parameshwara". This theory is supported by the sculpture of the images in several temples. In the Mithranandapuram temple, Trivandrum, which is a very ancient one, there is an image each of Brahma, Vishnu and Siva and the same is the case with the temples at Thiruvallam and Valivasala. There are other instances outside Travancore as well. The three aspects are often combined in one temple, the mandanam symbolising Siva in its constructive principle, the shrine itself symbolising Brahma, and the image and the Sikhafa which covers the shrine symbolising Vishnu.† Thus

[·] Yah tām vēthi sa mām vēthyo' tām sa hi mama.

[†] E. B. Havell, A Study of Indo-Aryan Civilisation Page, 109,

according to the true theory and practice of Hinduism all the Thrimurthis are equal and each may take the place of the other. The oneness of Siva and Sakthi has been emphasised in the Saundarya Lahari.

"Sivassākthya yukthō yadi bhavathi sakthā prabhavathum Na chēt Dēvām dēvō na khalu kalithā spandithumapi".

This means that Siva is unable to function, unable to stir without the association of the Dēvi, Śakthi. "Sakthi Tattva and Shiva tattva are inseparable, the former being only the negative aspect of the latter. Both exist even in dissolution."* According to the Mārkandēya Purāṇa and Dēvī Bhāgavatham all the gods and goddesses are but manifestations of the one single Supreme Being, Mahālakshmi, and should not be understood to be separate individual deities. Thus Hinduism favours the worship of one god and one god only. No religion defies the female principle and puts it on a footing of equality with the male principle as Hinduism does.

"The multiplicity of divinities", says Kādhākrishņan, "is traceable historically to the acceptance of pre-existing faiths in a great religious synthesis where the different forms are interpreted as modes, emanations or aspects of the one Supreme. In the act of worship, however, every deity is given the same metaphysical and moral perfections. The labels on the bottles may vary but the contents are exactly the same. That is why from the Rig Vēda Hindu thought has been characterised by a distinctive hospitality. As the Bhagavad Gīta has it, howsoever men approach me, so do I welcome them, for the path men take from every side is mine".† The Hindu faith is a homogeneous fabric which lends itself to a proper understanding if the search for truth is bona-fide and sympathetic.

^{*} Vide reference in Arthur Avelon. Studies in Mantra Sastra,

[†] The Legacy of India by Garratt, p. 276.

The worship in temples in Travancore is prescribed by the Agamas and the Thanthras, the literature of which

Temples and thanthras.

is of very long chronology and vast extent. The word thanthra literally means an easy method. Thanthric rules, though arranged

and amplified in later times, have their roots in the sacred literature of the Hindus, the Vēdās and the Brāhmaṇās. The Thanthras are not patches of isolated ceremonials. On the other hand, the principles and doctrines of the Vedas. Thanthrās and Purāṇās coalesce into a harmonious system designed for the spiritual elevation of mankind. In this scheme the Yanthras also play a not inconsiderable part, forming as they do the representation of the basic powers which permeate creation, though not perceived by the By manthra and yanthra, motions that are unharmonic and refractory become harmonious and focussed. When Hinduism developed itself into a complex and unascertained system, the details of which could be gathered only from countless treatises in Sanskrit which had ceased to be a living language, the exponents of particular creeds made an eclectic selection of prayers and rituals which in their opinion would make for certain efficacy of religious worship.

The authority of the Thanthrās is enhanced by the fact that they like the Vēdās are said to have emanated from Īśvaŕa himself. What appealed to the senses and through the senses to the higher planes of consciousness by their mystic grandeur necessarily found a prominent place in the new system. Particular movements of the hands and attitudes of the body were deemed indispensable to spectacular effect which, it was believed, would exercise a beneficial influence on the mind of the worshipper and enable him to rise in the higher rungs of the spiritual ladder. According to the thānthric system the mental proclivities (bhāvās) of hūman beings are of three kinds. The Paśu Bhāva or the tendency of a brute, the VIŕa Bhāva or heroic tendency and

the Deva Bhāva or divine tendency. The lower bhāvās may ultimately develop into the higher. But the result can be achieved only by assiduous cultivation. Sacraments are essential to success and the sādhaka has to conform to certain well-defined rules regulating ablutions, food and prayer. The word Thanthra is also used to denote the variety of the apparatus of ritualism suited to conditions of time, place and individual competency.

In Travancore as in the rest of Malabar the Thanthris are generally Nampūthiri Brahmans who by tradition and temperament follow the ancient āchārās Thanthras in and believe in the Vedas. They are the Malabar. accredited exponents of spiritual matters including the methods of worship. Notwithstanding the assaults of a new-fangled rationalism worship in temples is maintaining its ground. Mr. Kamachandra Rao says:-"An unbeliever in the efficacy of Yoga practices and Tantric rites may find it difficult to check a tendency to scoff at the proposition. But recent discoveries in the province of psychical phenomena relating to thought, telepathy, thought forms, clairvoyance, mesmerism and hypnotism have tended to so modify the general conceptions of the possibilities of human power and of existence beyond the earthly plane that it is no longer necessary to refer to the efficacy of Mantras in an apologetic tone. In these circumstances, it is sufficient for our purpose to assume the fact that temples consecrated with due Mantric and Tantric rites have the power of attracting to faithful worshippers all heavenly blessings for which man craves." *

The Thanthric form of worship is a combination what pūja means. of the yōga observances and the Vēdic manthras. The first requisite of efficacy is the purity and piety of the priest. This is to be attained by

^{*} Vide Ramachandra Rao's Report on Purificatory Ceremonies.

the performance of various external acts as well as dhyānam (meditation), japam (prayer). This is followed by the offerings of water, flower, sandal, incense, camphor and such like. The offering of water and sandal symbolises the identity of the archaka's visible body (Sthūla śarīra) with the universal soul. The offering of flowers establish the unity of the physical and mental powers of the priest with those of Īśvara. By offerings of incense it is understood that the archaka is freed of all his sins. By nivēdyam the gratification of the Kāraṇa śarīra of the man and the Virāt is obtained. "In making these offerings the priest has to picture to himself the elements and organs which these articles represent and their absorption into divinity".

These processes involve a combination of Manthras and Thanthras each supplementing the other and producing the maximum effect. The central idea in the manthra is that certain sounds uttered in the prescribed manner produce a vibration in the ākāśa which in its turn is communicated to the higher planes and transmitted to the image, the priest and the worshippers. The blaksharas which form the root of these Manthras are mystical words or letters which denote the mula (root) or the essential part of the Manthra or the name of the deity to whom it may be addressed or some part of it. Hindus as a rule believe in the efficacy of the Manthras, though there are individuals who are sceptical about their power and a few who are prepared to condemn them as the transmitted monuments of absurd superstition.

The Manthras are the best prayers of the ancients which have come down to us clad in majestic beauty and power. They are not mere concatenations of sound. On the other hand, they are such as awaken the inner consciousness of the individual who recites them and help him to enter into communion with the universal soul or the divine authority. It is therefore that in all the great

religions of the world the sound is said to possess marvellous powers. The divine word is conceived of in the Hebrew scriptures as having creative powers. In Greek ·logos' means thought and Herocletos maintained that 'logos' was the principle underlying the universe. According to Philo ideas mould matter. The Evangelist recognises 'Logos' as existing before creation, the perfect self-presentation of God. The fourth Gospel of Christ opens with the words 'in the beginning was the word and the word was with God'.* These are the very words also of the Veda. "Prajapatir vag idam asīt" with whom was vag or word. To which Avelon adds the commentary, "he is spoken to be second because he is first potentially in and then as sakthi issued from him". The universe is the outcome of the divine desire or will (Ichha). In the Brāhmaṇās and Upanishads "Vāg" is described as power. Śankaracharya declares that creation was preceded by the word from which the whole universe, the devas and organic and inorganic earth life were produced.

The Thanthrās indicate different parts of the body which are 'touched' in the pronunciation of the different letters of the Manthrās. The Thanthrās prescribe the method by which sādhana may be combined with śabda. It is therefore that in all systems of faith are found directions for the repetition of prayers a number of times. "The Sabda or sound exercises a potent effect on the mind which communicating the result through the nervous system makes the mind doubly fit for the perception of truth. All Mantras are in the body as forms of consciousness. When the Mantra is fully practised the samskara and artha appear to the mind. The priest who chants the Mantras communicates the result of his mental elevation to the devotees. Prayers and Mantras thus perform a most useful function."

It is significant that the Latin Church permitted prayers being offered in Latin for the benefit of congre-

[•] Vide Avelon

gations who did not understand a single word of that The Syrian Christians in Travancore and Malabar adhere to the Syriac language for service in their churches, though it has long been a dead language. Even the Muhammadans who looked upon the holy Prophet only as a great teacher as distinguished from God, insist that Arabic is indispensable for service in mosques. The chanting of manthras in Hindu places of worship is in accordance with the practice of the other great religions and is not only sanctioned by custom but also justified by the cold logic of science as well as the sanctions of faith. "More things are wrought by prayer than this world dreams of " is the verdict of the post who lived in the midst of the marvellous successes of material sciences in the Victorian Age. No wonder therefore that among the Hindus the chanted word retains its potency over the minds of men through thousands of vears despite the teachings of the numerous schools of philosophy and the permutations and combinations of thought ranging from Purvamimamsa to the undisguised atheism of the Charwakas and Lokayathas.

The Thanthras and Manthras, if properly performed. are believed to elevate the spiritual atmosphere in the temples. "The temple is thus the centre of divine influence, the place where the presence of the gods is known and felt, where the glory of the gods would now and again shine forth in the eyes of the worshippers, and where the love of the bhaktha would draw down a visible manifestation of the compassion of the deity. Every one coming with love and devotion to such a temple found descending upon him a celestial influence that calms the mind, that elevates the spirit, that changes all thoughts of world into thoughts of heaven, and that made prayer arise unchecked by any obstacle, so that the man felt for the time being, as if he had entered within the very gates of Svarga. So mighty a force is there that even the most careless man who came there was for the moment changed and spiritualised by the wondrous force

which dwelt in the temples, by the power radiated from the image of the god within it.......Such in truth it was in the old days and such it might be to-day." Kāmānuja knew the pleasure of realisation in the temple of Śrīrangam, Nandanār at Chidambaram, Chaithanya at Puri, Kāmadās at Panḍarpūr, Mēlpathūr Nārāyaṇa Bhaṭṭathiripād at Guruvāyūr, and Kāmakrishṇa Paramahamsa at Dakshineswar.

Superficial observers often revel in their characterisation of Hinduism as idolatry and superstition. Some see init a negation of ethical principles. This is the result of ignorance. The essential characteristic of Hinduism is faith. Purity of character is ensured by rules which regulate the practice of the worshippers as well as that of the priests. The idea of heaven and hell does not occupy a more prominent place in Hinduism than in the other religions. It serves to enable the bulk of humanity to respect virtue and abhor vice.

The place of temples in the scheme of the Hindu religion has been explained in the śastras. The Vishnu Samhitha, for instance, says: "It is not pos-Temples. sible for any one to contemplate any Deva without his image. If the intelligence is divorced from all images, where can it rest? In that case the intelligence either becomes weary or becomes subject to sleep. Learned men should therefore worship the Dēva through intelligence only as a Sākāŕa (with his image) remembering at the same time that He is really imageless. A learned man should not by any means renounce the image in which a Deva is intended to be contemplated upon". He may even worship the Deva in this manner either for moksha or for any ordinary phala (result). The early sages therefore represented God as Saguna or one with attributes, in which capacity he was regarded as having three aspects, viz., those of the Creator, the Preserver, and the Destroyer. It was for the benefit of

the worshipper that form was thus attributed to Brahman, which, in reality, is effulgent, immeasurable, unqualified and formless. Naturally, the deities came to be regarded as anthropomorphic; for, as Christianity concedes that man is of the image of his maker, so does Hinduism contemplate the natural human form. This is well expressed by Vive-kananda who says that if cats become philosophers, they will think of a cat god; if cows become philosophers, they will think of a cow god. But whatever be the form, a prathima or image becomes necessary and useful in that it helps concentration.

Some scholars hold that the worship of images in the temples was a post-Buddhistic development. The Travancore Temple Entry Committee has, however, accepted the view of eminent orientalists like Dr. Bollensen, Professor Gardner, Dr. Stenkonow and Mr. B. C. Bhattacharya who maintain that there are in the Vēdās themselves clear references to the existence of temples in the Brahmanas, Dharma Sūthrās and Dharma Śāstrās. The large number of Agamas attest the popularity as well as the utility of temples. These Agamas are treatises on temples and temple worship. There is a very large number of them; the more important ones accepted as authorities in Kērala are the Panchaŕāthra, Pāśupatha, Vishņu Samhitha, Kāmyakāgama, Vykhānasa Āgama, Īśānaguru Paddhathi, etc. There are also compendia of which the Thanthra Samuchayam is the most popular.

The idea underlying the consecration of the image is thus explained. "Just as the atmospheric air is made capable of being sensed by the action of the fan, and the hidden fire in the fire-sticks is generated by friction, so the all-pervading divine energy is transfused into the image by the process of the Āvāhana rites." The daily services or the pūja and the periodical special services, such as Uthsavās, infuse

the divine spirit in the image. As matters stand at present, the temples are the solace of the vast bulk of Hindus. the confusion of ideas which has resulted from a commingling of eastern and western notions has created a feeling on the part of certain individuals that temples encourage idolatry and are therefore pernicious in their influence. This proceeds from a fundamental misconception. "All over the world," says Vivēkānanda, "you will find images in some form or other; with some, it is in the form of a man, it is the best form. If I want to worship an image I would rather have it in the form of a man than that of an animal or building or any other form. One sect thinks a certain form is the right sort of image and another thinks it is bad. The Christian thinks that when God came in the form of a dove it was all right, but if He comes in the form of a fish, as the Hindus say, it is very wrong and superstitious. The Jews think that if an idol be made in the form of a chest with two angels sitting on it, and a book on it, it is all right, but if it is in the form of a man or woman it is awful. The Muhammadans think that when they pray, if they try to form a mental image of the temple with the Kaaba, the black stone in it, and turn towards the west it is all right, but if you form the image in the form of a church it is idolatry." It is obvious that the limited faculties of mankind demand something concrete, some help to conception, some aid to visualisation, and some assistance to concentration in order that the great mystery of the universe may be appreciated, understood and realised.

Some of the Smrthis assign to Jnana marga (the path of knowledge) a higher place than Bhakthi marga (the path of devotion) and these texts are sometimes cited to show that image worship is one of the lower forms of religion fit only for the alpa buddhis or the unlearned. The word alpa buddhi is used only in a relative sense and denotes only those who are in

a lower plane than the Pandits or the particularly learned. The argument that civilisation has advanced to a remarkable degree and enabled the nations to believe in God and worship Him without the aid of artificial symbols cannot carry much force. Religion is not a matter in which the law of averages or the pretensions of democratic majorities can afford any test; for, so long as new generations are brought into existence the preponderating number of alpa buddhis in the world is bound to continue. The temples are therefore necessary for spiritual education for all time. That is the view of Hindu thinkers. It must be remembered that image worship is not confined to the unlettered or the unreflective. The best products of the Hindu intelligence, nurtured on the wisdom of the west as well as of the east, men and women who shine with equal lustre in the domains of science, politics and philosophy, show by their own conduct that the temples are institutions which should be preserved and maintained with scrupulous care. Rulers of states who have earned reputation throughout the world for enlightened notions and refined sentiments do offer worship in the temples.

To the temples in Travancore come pilgrims from all parts of India. The fame of Ananthaśayanam, Janārdanam Thiruvaṭṭār and Cape Cōmorin attract pious devotees. Some of these have been famous from very ancient times and have merited mention in the Purāṇās. The consecration of these temples is attributed to great Maharshis and other saintly personages like Paraśurāma, Khara and Vilvamangalaṭhu Swāmiyār. There is perhaps no temple in any other part of India which has maintained the continuity of its traditions and preserved its purity from profanation as the temples in Travancore.

The sovereigns of Travancore have always been men of deep piety. The dedication of the State to Śrī Padmanābha by Mahārāja Mārthānḍa Varma, the maker of modern Travancore, nearly two hundred years ago, is a landmark in the political as well as the religious Temples and the history of the State. Under the terms of State. dedication the Mahārāja, on his own behalf and that of his successors, undertook to administer the country as the vice-gerent of the deity. The treaties between Travancore and the Kajas of Parur and Alangad whose territories were incorporated into Travancore provided for the management of the temples in the ceded areas. Apart from all these is the authority of the rulers in exercise of what is called Melkoima right which has been defined as the right which the sovereign power possesses over property of which the ownership is in others. right of superintendence, an incident of sovereignty.

The origin and history of temples in the State are discussed in detail in many public documents. The temples whose management is vested in the Sirkar by law or custom are called Sirkar Dēvasvoms. These may be divided into:

- 1. Those founded by the sovereigns themselves, such as the Krishnaswāmi temple at Neyyāttinkara and the Ānāndavallīśvaram temple at Quilon, the temples in Trivandrum other than that of Śrī Padmanābhaswāmy, and those at Padmanābhapuram, Thrpparappu, Vaṭaśśēri and many other places. All these have been dedicated to public worship.
- 2. Those temples to the management of which the Sirkar has succeeded by virtue of conquest. On the conquest of the territories of Nedumangād, Koṭṭārakara, Quilon, Kāyamkuļam, Thekkumkūr, Vaḍakkumkūr and Ampalapuļa the temples in those tracts passed to Travancore whose ruler succeeded to the mēlkōima right. The revenue account of 967 M. E. mentions 29 temples in Éttumānūr, the Karikōḍe temple in the Thoḍupuļa taluk, the Krishṇaswāmy temple in the Ampalapuļa taluk, the Taliyi temple at Kōṭṭayam and the temple at Kaduthuruthi.
- 3. The temples owned by the people and managed by the \overline{U} rānmakkār. There is a very large number of them

distributed throughout the whole State, some of them possessing extensive immovable properties besides movables of considerable value. The position of the Utanmakkar is that of a trustee. Their number varies in the different temples. The place is generally hereditary and confined to families of high social position and local influence. The understandings arrived at when particular temples were founded and endowed are followed. The courts have jurisdiction in cases of mismanagement. The Government may also interfere under the Religious and Charitable Endowments Regulation. There are numerous temples belonging to certain communities like the Ilavas, Konkanis and several other castes including the backward communities. Some of these temples are popular and are well managed.

Under this class fall the Devasyoms which the Sirkar acquired through treaties or agreements with the rulers of Cochin, Parūr, Alangad, &c. We find that in the year 953 M. E., 38 temples were being maintained by the State in the Alangad mukham. The temples in what was once Panthalam territory came under Travancore when the ruler of that State surrendered his kingdom in 1820 with its 25 temples. The Śrī Vallabhaswāmy's temple in Thiruvalla came under Sirkar management in pursuance of an agreement executed in 927 M. E. by the managers of that Deva-Nelly-akat Bhagavathi temple at Kūthāttukulam svom. was originally maintained by a Nampūthiri Brahman. On the Sirkar imposing additional taxes on some of the properties held by him he agreed to surrender the temple and the lands so that the income might be utilised for the expenses.

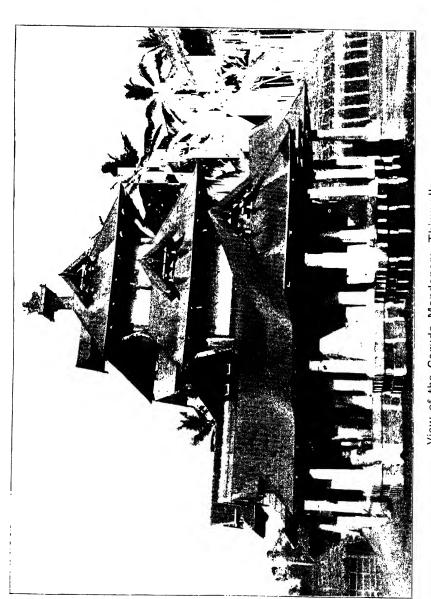
4. The temples which have been assumed for management by the Government from 986 M. E. onwards,

Assumption of management by the State.

Assumption of management by the State.

Assumption of management by the State.

Assumption of management by the Government from 986 M. E. onwards, latterly under the Religious and Charitable Endowments Regulation. Even before Munro's time the Sirkar had some share large or small in controlling the affairs of so many as 1,567



View of the Garuda Mandapam, Thiruvalla.

temples. The assumption of the religious institutions for management during Col. Munro's administration is an important landmark in their history. The orders of Government on the subject emphasise that the assumption was in the interest of better management. But it led to a mixing up of accounts relating to income and expenditure. The rents and profits from immovable properties and other collections which were until then kept separate in the strong rooms of the temples were thenceforth to be credited in the Sirkar accounts, thus bringing about a complete merger. In the case of Uranma temples which came under the control of Government subsequently, a different system of keeping accounts was adopted, their income being credited under the heading of Personal Deposit and their expenditure separately charged. These latter are called unincorporated Devasvoms, while the former are known by the name of incorporated Devasvoms. Attempts were made in certain quarters to make out that Munro's assumption of the management of temples was an act of confiscation, but it has been ruled by the Travancore High Court in a number of cases that the assumption was not a confiscation or usurpation and did not vest the properties attached to these institutions in the Sirkar. It was held that the Sirkar's position was only that of a trustee. On this point the opinions expressed by Mr. P. K. Nārāyana Pillai in his dissenting minute attached to the Report of the Devasvom Separation Committee may be quoted with advantage.

"So long ago as 1050 M. E., Dewan Mr. Seshia Sastri recognised that the State is a trustee with respect to the Devasvoms under its control. In the review of his Administration Report for 1048 and 1049, there was a query by the Madras Government whether it was not possible to separate the trust fund from the general State revenues. The Dewan replied that he would fain have ordered the separation if it were possible. This deliberate admission by the State through its accredited spokesman was never repudiated

by any of the succeeding Dewans. Mr. Ramachandra Rao maintains the trust theory in his Report on State Charities and Devasvoms. Sir P. Rajagopala Chari accepted the position and proceeded to separate the Devasvom lands and their rents from Sirkar lands and the general revenue. I see no means to get over the force of all this or to invite Government to adopt the change of front advocated by my colleagues. In this connection I wish to draw attention to the opinions of Messrs. A. Govinda Pillai (Retired High Court Judge), P. Ramakrishna Aiyar (Retired Dewan Peishkar), S. Krishna Aiyar (High Court Vakil) and others in answer to the Committee's questions supporting my view of the matter".

In regard to the position of the Sirkar towards incorporated Devasvoms the Report of the Devasvom Separation Committee says: "Col. Munro's ob-Incorporated ject also, as may be clearly seen from the Dēvasvoms. recitals in his order, dated the 3rd Kanni 987, was the better management of the institutions taken over by him. The same sentiment was reiterated in the order dated the 18th Thulam 987 appointing a committee to fix a scale of expenditure for the Devasvoms concerned. might be seen from these documents that it was not the intention of the State then to appropriate the incomes from the Devasvoms for the purpose of the State so as to leave them without any source of support. The State clearly undertook the responsibility for the proper and efficient upkeep of these institutions and it never swerved from this But, on the other hand, successive sovereigns have uniformly been giving their whole-hearted support to that policy. When the Devasvoms were taken over by Col. Munro, no reservation was made as regards the liability to account or the keeping of the Devaswom properties and income separate from the State ayacut. The absence of a provision similar to that enacted in sections 13 and 14 of the Religious Endowment Act is significant,"

"From the political and other considerations which weighed with Col. Munro in deciding on the assumption of the Devaswoms, from the clear and un-Theory of Trust ambiguous orders on the subject, from the and other theories. complete merger of the revenue of the Devaswom lands in the public revenues, from the long course of treatment accorded to them, and from the recognition of the holders of these lands as permanent occupants with heritable and transferable rights, at successive settlements, we are inclined to hold that the position of the State with reference to these Devaswom lands is more that of a sovereign proprietor, legally accountable to none for their management, than that of a trustee. This, it will be observed, is the view held by the Cochin Government with regard to the Devaswoms in that state assumed by Col. Munro under similar circumstances and almost contemporaneously. (Vide preamble to the Cochin Proclamation dated the 29th Makaram 1085 / 11th February 1910).

"However, it is unnecessary for us to pursue this point further, as in any case, whether as a trustee or otherwise, the Government have undertaken, by their public pronouncements made from time to time, the responsibility to maintain these institutions efficiently, thus realising their obligation towards Devaswoms, which the act of incorporation entailed on them. Dewan Sir P. Rajagopala Chari stated, in the Devaswom re-organisation G. O. of 1912, 'Independently of His Highness the Maha Raja's undoubted rights to maintain, out of the revenue of the State, the institutions of the Hindu religion, there is the circumstance, in regard to the Devaswoms taken up in 987 M. E. by Col. Munro, that the Sirkar then, by a solemn act, undertook the obligation to maintain them in an efficient condition for all time to come. This obligation will always be borne in mind by the Government.'

"Even apart from the obligation referred to supra, this State, in virtue of its constitution as a Hindu state,

is bound to maintain these institutions. We think it will not be out of place here to add a word about the sacred character of the Thrppadidanam of 925 M. E. In that year, King Marthanda Varma formally made over the whole of his kingdom to his tutelary deity Sripadmanabha and assumed its management as the vassal of the deity. This dedication accentuates the Hindu character of the Regarding this act, Justice A. Govinda Pillai, State. whom we have already quoted, says:- 'It will be impossible to imagine a more formal inauguration of a State church than this surrender (2845) acro.)'. He adds 'as Hinduism is the established religion of the State it is bound to maintain the Devaswoms even apart from the assumption of 987 M. E.' In an earlier paragraph we stated that this ancient land has been a Hindu state throughout, unaffected by foreign invasions. This Danam was made, it has to be borne in mind, by the Sovereign who conquered and consolidated the petty states and felt that he had the right to do so. Closely following the Danam of 925 M. E. came another similar Danam of 941, of territories which subsequently came into the possession of the Sovereign (viz., Parur and Alangad). When these two territories, though conquered, were formally ceded, their former Rajas, in so doing, added a clause in the document evidencing the cession to the effect that their Devaswoms should be managed efficiently : എപ്പേർ പെട്ടതും അനുഭവിച്ചം കൊണ്ടു പ ജകളേയും ദേവ ബ്രാഹണരേയും കീഴ°മയ്പാടകൊത്തവണ്ണം രക്ഷിച്ച നമ്മേയും രക്ഷിച്ച കൊ മൂകയും വേണം. This passage is significant. Any measure therefore tending to diminish the importance of these institutions or to curtail the expenditure absolutely required for the due performance of the ceremonies obtaining therein in accordance with past usage would be regarded as tending to uproot that Hindu character.

"The systematic inculcation of a particular religion by the State is a long-standing practice having its origin in very ancient times. This practice obtains not only in India but in European countries also. In England there is an established church maintained at State expense.

"Viewing the matter from another standpoint, viz., the income accruing to the State from the properties of the Devaswoms, we have no hesitation in holding that the State is bound to maintain them efficiently."

The Report of the Devaswom Separation Committee was thrown open to public discussion and the law relating to the position of the Sovereign in relation to the Hindu temples was explained by eminent lawyers like Rash Behari Ghose and C. P. Kāmaswāmy Iyer. A Press Communique was issued by Government on the subject which deserves to be quoted in full as it presents all the relevant facts.

"Prior to the days of Col. Munro, the Dewan-Resident, Hindu temples in the State were mostly under the management of private bodies called Oora-Press Communique. lars or Karakars. As these bodies were found to mismanage the institutions committed to their charge, Col. Munro decided in 987 M. E. (1811-1812 A. D.) that the State should assume control over them, and accordingly the Government assumed the management of these temples with their properties, movable and immovable. Col. Munro's order of assumption does not enumerate the Devaswoms, the management of which was assumed by Government; but the Thirattu of that year mentions 348 major and 1,123 minor Devaswoms as those maintained or aided by Government. Subsequent to 987 M. E. some more Devaswoms have similarly been assumed; even in their case there are no records to show their exact number. In the case of some of the Devaswoms subsequently assumed, separate accounts of their assets, income and expenditure have been maintained and these institutions are financially autonomous and have each a personal deposit account with Government treasuries. In the case, however, of the remaining Devaswoms, which form the

large majority, the income and the expenditure have been merged in those of the State and no separate accounts of such income and expenditure have been maintained except for a few years immediately following the assumption.

"The income in grain and in cash from the landed properties of the Devaswoms assumed in 987 M.E. was, according to the accounts of that year, 15,80,491 paras of paddy and Rs. 53,092 in cash, and their average annual income for the five years commencing with 987 M. E. was 16,06,281 paras of paddy and Rs. 60,608 in cash, which proves that the tendency of this income was to rise year after year. The accounts of 987 M. E. further show that up to 986 M. E. the State was contributing from the general revenues an annual sum of Rs. 23 lakhs towards the maintenance of temples. The practice of keeping separate accounts for the income derived from the properties belonging to the temples gradually ceased and the properties themselves in some cases began to be shown in the public accounts as Sirkar properties. Even so early 1048 M. E. Dewan Seshiah Sastri pointed out that it had become difficult to separate Devaswom lands from those of the Sirkar. The process of merger received a further impetus during the last survey and settlement, when many of the temple properties were entered in the accounts then prepared as Sirkar properties and their tenure was described as Pandaravaga. It has accordingly become altogether impossible in the present day to fully separate from the Sirkar lands the lands that originally belonged to the temples.

"As stated in the foregoing paragraph, the income of 16,06,281 paras of paddy and Rs. 60,608 in cash of the Devaswoms assumed in 987 does not include the income from the properties belonging to Devaswoms assumed subsequently. Both these sets of institutions had also other fluctuating income in the shape of offerings from devotees. Further, the income in paddy and cash already mentioned does not exhaust the claims of these institutions over

their properties. The following are examples of further claims:—

- "(i) The claim of the Devaswoms over their Cherikal lands on which shifting cultivation used to be carried on formerly but which were subsequently either registered as Pandaravaga during the last revenue settlement or included in State Forests during Forest Settlements. The value of this claim, though indefinite, is substantial.
- "(ii) The claim to increase in revenue due to extensions of cultivation which form the natural concomitant of increases in population. It has been noticed that even in the five years immediately following the assumption, the income from the landed properties of the temples showed a steady rise. This claim again, though indeterminate in character, is not negligible.
- "Administrative reforms between 987 M. E. and 1081 M. E., abolishing taxation in kind and substituting money payments at a commutation rate either of 6 Chs. or 11 Chs. per para of paddy, have been extended to the lands from which the Devaswoms were deriving a paddy income. This action has subjected Devaswoms to a pecuniary loss. The average cash value of a para of paddy between 1091 and 1096, calculated on the basis of prices reported from the several price recording stations in the State, is 27 Chs. and 7 C. or 27 Chs. per para; the 16,06,281 paras of paddy, which the Devaswom lands were getting on an average immediately after their assumption by the Sirkar, are worth Rs. 15,48,913. This together with their average cash income of Rs.60,608 from the garden lands, etc., gives a total revenue of Rs.16,09,521 or in round figures Rs. 16,00,000. To this must be added the money equivalent of the other indeterminate but none the less valuable claims of the Devaswoms already alluded to. The expenditure incurred by the State on the management and maintenance of the temples, which fluctuated between 5 and 6 lakhs of rupees in the days of Col. Munro, has naturally gone on increasing owing mostly

to the gradual rise in the prices of commodities and wages for services. The annual expenditure on supplies and services in regard to these institutions has, in recent years, averaged Rs. 12 lakhs, while that incurred on renewals and repairs to their buildings and appurtenances has averaged Rs. 3 lakhs. In other words, the total average recurring expenditure on account of the Devaswoms is at present Rs. 15 lakhs a year, as against their determinate annual income of Rs. 16 lakhs mentioned above.

"With a view to secure better efficiency in the management and control of the Devaswoms, Messrs. Chempakaraman Pillai and Rajaram Rao were deputed in July 1905 to investigate the question of regulating their expenditure both as regards pathivus and as regards the purificatory ceremonies. As the information collected by these officers was merely of a preliminary character Mr. M. K. Ramachandra Rao, a Puisne Judge of the High Court, was in May 1907 placed on special duty to make a more detailed investigation into the affairs of the Devaswoms and to formulate proposals which would enable Government to secure their more efficient management and control. The Proceedings of the Government passed in 1912 on the report submitted by Mr. Ramachandra Rao. (D. 4905 dated 25-10-12) contemplated the separation of the Devaswom revenues from the general revenues. In the course of their Proceedings, Government observed that it is not now their intention to make any change either in the tenure or in the assessment of the Devaswom lands. They recognise that the settlement of the Devaswom lands already made cannot be disturbed for the balance of the settlement period. But when the next settlement is taken up. it will be the duty of Government so to regulate it in regard to Devaswom lands that the Devaswoms should get the full revenue due to them. The Government will bear in mind that their position in regard to Devaswom lands is fundamentally different from their position in regard to the Sirkar lands.

"In pursuance of this order of Government, Devaswom lands were attempted to be identified and the revenue derived from them separated from the Dévaswom Sirkar Land Revenue. The attempt at a Separation. complete identification of the Devaswom lands failed for reasons already set forth and in G.O. No. D. 952 dated 3-4-1920, Government appointed a mixed Committee of Hindus and non-Hindus to consider and report upon the exact character of the assumption of these Devaswoms, the feasibility of separating their administration from the Land Revenue Department, and the nature and cost of the additional staff that might be necessary if the organisation of a separate department be deemed desirable. The Committee have, in their valuable report. recommended that the administration of the Devaswoms should be separated from the Land Revenue Department and entrusted to a distinct agency and that, as the work of the Land Revenue Department would be curtailed thereby, a portion of the funds necessary for the formation of the new department should be found by reducing its strength. With regard to the relationship that subsists between the State and the Devaswoms, the Committee is unanimously of the opinion that the Devaswoms were not confiscated by Col. Munro, but that the object aimed at by him was their better management and maintenance, and that the Government have incurred an obligation to maintain the Devaswoms efficiently for all time to come. The members of the Committee differ, however, in one While the majority holds that the State being a Sovereign Proprietor is legally accountable to none for their management, the dissenting member is of the opinion that the assumption extended only to management, thereby constituting the State a trustee of the Devaswoms and that, as the State has mixed up the trust property with its own, the entire expenditure in connection with the Devaswoms, however large, is a legitimate charge upon

its general revenues. The Government of His Highness the Maha Raja have taken the necessary legal opinion and have come to the conclusion that the State's assumption of these Hindu Religious Institutions in the days of Col. Munro was an act done in the exercise of the traditional right of "Melkoima" inherent in the Hindu Sovereigns of the State and that it was not an act of confis-The Government are accordingly under an undoubted obligation to maintain the Devaswoms for all time properly and efficiently, especially in view of the circumstance that, had all the properties of these Devaswoms been kept separate, the progressive income therefrom might have been more or less sufficient to defray all the expenses connected with their efficient management. Government have also come to the conclusion that, for the proper discharge of this obligation, the creation of a separate department, which will devote its atttention exclusively to the administration of Devaswoms. is necessary.

"It has already been stated that the current cash value of the determinate income of the Devaswoms from their landed properties amounts to Rs. 16 lakhs. This figure bears roughly the proportion of 40 per cent, to the present land revenue of the State and to this extent at least the Davaswoms are entitled to a guarantee from the Government. The recurring annual expenditure on these Devaswoms has, as already stated, averaged in recent years Rs. 15 lakhs; but it must be remembered that their pathivus have not been fully revised and that there is much to be done by way of repairs and renewals to their buildings and appurtenances. It would therefore be necessary to set apart, as reserve for unforeseen contingencies, the difference between the two sums. They have accordingly resolved to credit annually in the future a sum, 40 per cent. of the State's recurring land revenue, to Devaswoms and constitute a Devaswom Fund comprising this allotment and the other miscellaneous items of revenue like offerings, etc., received by them.

"In regard to the orders of Government issued in 1912 that the next settlement should be so regulated as to enable the Devaswoms to secure the full revenue from their lands, the Devaswom Separation Committee have pointed out that this pronouncement of Government has created an amount of fear and discontent which it would be wise to allay, and have expressed the emphatic opinion that the policy therein enunciated should be abandoned, and that adequate measures should be taken to conserve and safeguard the privileges which the holders of the Devaswom lands, in common with the holders of Pandaravaga lands, have, as a matter of fact, enjoyed for over a century, and that fixity of tenure should be guaranteed to them as in the case of Pandaravaga lands. Government concur in this view and resolve to declare all Devaswom lands as Pandaravaga lands and to place the holders of the former in the same position as that of the latter. This decision involves a substantial loss of revenue to the Devaswoms; but, in view of the lasting benefit which this measure would confer on a large section of His Highness' subjects, Government feel that this sacrifice of revenue must be faced by them and also that the Devaswoms should not suffer on this account. Government have also to take into consideration the indeterminate claims alluded to in paragraph 3 and which the Devaswoms have to forego. Taking into account all these circumstances, and also the voluntary contribution which the State was making prior to Col. Munro's assumption, the Government further resolve to meet from the general revenues the entire cost of the separate Devaswom Department now proposed to be created and to reserve to themselves the right to make to the Devaswom, when absolutely necessary, additional contributions from the general revenues of the State in any particular year. The Proclamation issued to-day under His Highness' Sign Manual

is intended to give a legal basis to the resolutions of Government already detailed.

"The Schedule attached to the Proclamation requires a word of explanation. Disparities in the number of Sirkar Devaswoms had long been in existence, as correct statements of such Devaswoms had not been kept during the days of Col. Munro or subsequently. The figures given in the Thirattu of 987, the several Administration Reports, the lists prepared by special officers (Messrs. Chempakaraman Pillai and Ramachandra Rao) and in the Devaswom Separation Committee's report do not tally with each other. The verification undertaken by Government has shown that reconciliation between the different figures is possible only in the case of Major Devaswoms which number 334 and not in the case of Minor Devaswoms which have been identified and are tentatively included in the Schedule together with the 334 Major Devaswoms. A comparison of the lists of Minor Devaswoms now furnished by the Division Peishkars with those already prepared by Messrs. Chempakaraman Pillai and Ramachandra Rao shows that as many as 322 institutions remain to be accounted for. In regard to these Government consider that a further investigation on the spot by a responsible officer is necessary and that the Schedule should be revised in the light of the report of that officer and republished. This will be done in due course.

"Government trust that the Proclamation would set at rest long-standing controversies about the status of the Devaswoms and confer substantial benefits on a large section of His Highness' subjects holding Devaswom lands. The Proclamation would also serve to remove the disability under which a large section of His Highness' subjects have been labouring in the matter of admission to the Land Revenue Service of the State. As for the Devaswoms themselves, it is hoped that they would enter on a new era of efficient management and prosperity."

The following is the Royal Proclamation issued by The Devaswom His Highness the Mahārāja Śrī Mūlam Proclamation. Thirunāl.

- "Whereas, in virtue of the Melkoima right vested in the State, the administration of certain Devaswoms along with their endowments was, owing to their mismanagement, assumed by it in 987 M. E. with a view to their better management, and to the maintenance of the said temples and their appurtenances in good condition;
- "And whereas the income from the immovable property alone of the said Devaswoms amounted at the time of assumption to 15,80,491 paras of paddy and Rs. 53,092 in cash:
- "And whereas the said incomes from Devaswoms had, in course of time, become absorbed in the general revenues of the State and the expenditure therefor was met out of such general revenues;
- "And whereas, owing to various causes, a large portion of the immovable property of the said Devaswoms had been treated in course of time as Pandaravaga lands and in consequence become incapable of identification and separation;
- "And whereas by Proceedings of Government No. D. 4905, dated the 25th October 1912, Our Government resolved that, in view of their position in respect of the said Devaswoms, it was their duty so to regulate the next land revenue settlement as to ensure to the said Devaswoms the full revenue from their immovable property;
- "And whereas the above said resolution, if given effect to, is calculated to operate detrimentally on the material welfare of Our beloved subjects;
- "And whereas the conversion into Pandaravaga tenure of all Devaswom lands is calculated to be beneficial to Our beloved subjects;
- "And whereas the income from the immovable property of the said Devaswoms and of those whose

management has been assumed since 987 M. E., had it been kept separate, should, along with their other income, be ordinarily sufficient for their proper maintenance;

"And whereas in view of Our faith and religion it is Our solemn right and duty to maintain efficiently and in good condition, Hindu religious institutions in Our State, irrespective of the income from such institutions or the cost of such maintenance, and in pursuance of such right and duty Our State has, from time immemorial, contributed from its Exchequer to the cost of such maintenance to the extent necessary;

"And whereas doubts have been expressed as to the position of Our Government in relation to the said Devaswoms;

"And whereas it is necessary to remove those doubts and to provide for the better management and more effective control of the said Devaswoms;

"We are pleased to command as follows:-

- 1. (1) This Proclamation shall be called the Devaswom Proclamation, 1097.
- (2) It shall come into force on the 1st Chingom 1098.
- (3) It shall apply to the Devaswoms mentioned in the Schedule.
- "2. Schedule means the Schedule attached to this Proclamation.
- "3. Our Government shall, out of the Devaswom Fund constituted under Section 4, maintain the Devaswoms mentioned in the Schedule, keep in a state of good repair and to the extent they consider necessary, the temples, buildings and other appurtenances thereto and administer the Devaswoms in accordance with such usage and custom as may be recognised by Our Government.
- "4. There shall be constituted for the Devaswoms mentioned in the Schedule a fund called the "Devaswom Fund". Such fund shall consist of:—

- (1) allotment made in the State Budget every year for the said Devaswoms, such allotment not being less than forty per cent. of the Ayacut and Sanchayam land revenue of the State;
- (2) the moneys realised from time to time by sale of movable properties belonging to the said Devaswoms;
- (3) all voluntary contributions and offerings made by devotees;
- (4) interest on investments of funds belonging to the said Devaswoms;
- (5) all other moneys belonging to or other income received by the said Devaswoms.
- "5. Any unspent balance out of the allotment mentioned in Sub-section (1) of Section 4 shall be added on to the Devaswom Fund.
- "6. All immovable properties belonging to the Devaswoms mentioned in the Schedule and now shown in the Revenue accounts as "Devaswomvaga" shall hereafter for all intents and purposes be deemed to be Pandaravaga and dealt with as such.
- "7. (1) Our Government may for the better and more efficient management and more effective control of the Devaswoms mentioned in the Schedule organise a Devaswom Department of the State consisting of such number of Officers and other servants as they think fit.
- (2) The expenditure in connection with the said department shall, notwithstanding anything contained in Sections 3 and 4, be met out of the general revenues of the State.
 - "8. Our Government may, from time to time:--
- (1) define the powers and duties of the Officers of the Devaswom Department;
- (2) regulate the scale of expenditure of the Devaswoms; and
- (3) make Rules generally for carrying out the purposes of this Proclamation.

- "9. No suit shall lie in any Civil Court against Our Government:—
- (1) for anything done in relation to the Devaswoms mentioned in the Schedule and their properties before the commencement of this Proclamation; and
- (2) for anything done or purporting to be done in pursuance of this Proclamation.
- "10. Nothing contained in this Proclamation shall in any way affect Our right to contribute out of the State funds:—
- (1) towards Sri Pandaravaga expenditure to the extent deemed necessary by Us; or
- (2) to other Devaswoms in or outside the State; or
- (3) to the performance of the customary religious ceremonies conducted under Our command."

The Proclamation has placed the temples and their management on a secure and efficient footing. Besides the

Temple Entry Proclamation. institutions originally owned by the Sirkar there are others which have been handed over or lapsed to it by escheat, or assumed

under the Religious Endowments Regulation on account of the incapacity of and mismanagement by the trustees. One circumstance which has contributed to the waning of popular interest is the apprehension that offerings made to pagodas are not wholly utilised for purposes for which they are intended by the donors. This has been responsible for the deterioration of numerous temples which are in a state of disrepair. This explains the fact that the total number of Hindu temples in the State shows a continuing decrease. Their number in 1820 was 21,658 and that of churches and mosques was 301 and 252 respectively. The last census gives 9,250 temples, 2,627 churches. This is due to the circumstance that while Christian associations of a voluntary character financed from abroad pursued their

work with unremitting zeal, the Hindus were left without any organisation, depending for the protection of their spiritual concerns primarily on the efforts of the Government. The Dēvaswom is but one of the many departments which the Government is obliged to control. The expenditure on the Dēvaswoms was frequently stinted and there were occasions on which the Paramount Power advised the Sirkar not to incur any large expenditure in conducting the religious ceremonies such as Dānams and feastings.

The standards of the west which gained currency with the spread of English education had also their repurcussions on the religious instincts of the people at This was accentuated by the long-established custom which prevented the members of certain castes defined as untouchables and unapproachables from entering the temples. These classes were for a long time content to offer worship in their own temples or pray to the deities installed in caste Hindu pagodas from the allotted places of prescribed distance. In course of time a feeling of selfrespect asserted itself along with the desire to share in the religious life inside the temples hitherto permitted only to the savarna castes. The demand for temple entry assumed shape and proportions and secured the sympathetic support of large numbers of people belonging to the savarna classes. Soon after the accession of His Highness the Mahārāja, Śrī Chithira Thirunāl, a Committee of nine members presided over by Dewan Bahadur V. S. Subrahmonia Aiyar was appointed to enquire into and report on the question of Temple Entry to the Avarnas. The enquiry brought to light the wide-spread and liberal sympathy of the Savarnas as well as the insistent demand of the Avarnas who appeared to believe "that religious worship and rites would be more efficacious if they are performed from within the temple in sight of the image". Thougha large section of the privileged communities expressed the fear that efficacy of worship in the temples would suffer if

non-caste Hindus were given admission, there was a larger number of Savarnās who thought that if entry was allowed to them "the temples will not only be not reduced of their sanctity and the efficacy of the worships or the rites performed in them but would really enhance them by the worship of a larger number of people".

Of the 325 Sarvanas examined by the Committee 238 favoured entry and only 87 were against it. Among them were many women. The Committee observed:-"Frcm the preponderance of the oral evidence and the information as to the general feeling in the country which we have been able to gather from that evidence it is clear that there is a strong feeling among Savainas in favour of temple entry being allowed. At the same time it has to be recognised that there is a considerable opposition from a large body of Savarnās from the other side". "Many of the witnesses", they added, "who gave their opinion against temple entry were prepared to concede that if a properly constituted Parishat were to approve of any relaxation in the rules prohibiting the entry of Avarnas they would be satisfied that entry to that extent would not derogate from the sanctity of the temple and the image". They therefore suggested a Parishat consist ing of Thanthries, Vādhyāns, and other men of religion learned in the Sastras and conversant with present-day world movements. The throwing open of some temples to Avarnas, the building of other temples for common worship, the permitting of Avarnas to enter all temples subject to time specification and the concession of approach to the Belivattam, were among the compromises proposed by the Committee. After considering the question in all its aspects and taking the opinions of such spiritual persons as were deemed fit, His Highness Śrī Chithira Thirunal Maharaja issued the famous Temple Entry Proclamation on the auspicious occasion of His Highness' birthday in November 1936. The Proclamation is as follows:-

PROCLAMATION

BY

His Highness Śrī Padmanābha Dāsa Vanchipāla Sir Řāma Varma Kulaśēkhara Kirītapathi Mannēy Sultān Mahā Řāja Řāja Řāma Řāja Bahadūr Shamshēr Jang, Knight Grand Commander of the most eminent order of the Indian Empire, Mahārāja of Travancore, issued under date the 27th Thulām 1112, corresponding to the 12th November 1936.

Profoundly convinced of the truth and validity of Our religion, believing that it is based on divine guidance and on an all-comprehending toleration, knowing that in its practice it has, throughout the centuries, adapted itself to the needs of changing times, solicitous that none of Our Hindu subjects should, by reason of birth or caste or community, be denied the consolations and solace of the Hindu faith, We have decided and hereby declare, ordain and command that, subject to such rules and conditions as may be laid down and imposed by Us for preserving their proper atmosphere and maintaining their rituals and observances, there should henceforth be no restriction placed on any Hindu by birth or religion on entering or worshipping at the temples controlled by Us and Our Government.

Sign Manual.

The proclamation was hailed throughout India and the civilised world as a great charter of liberty. The reputation of the Mahārāja for piety and respect for the forms as well as the principles of Hinduism gives the proclamation an enhanced value by the guarantee that the opening of the temples to the Avarnās and non-Hindus

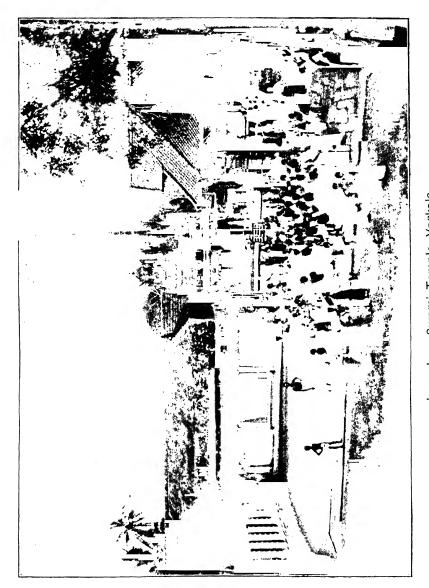
who accept the creed of Hinduism does not militate against the Āgamās and the Šāstrās. The reform has been effected under the advice of a Dewan who is himself a Hindu with deep knowledge of spiritual as well as secular affairs. Women are perhaps more conservative than men. But in Travancore the example of Her Highness the Mahārāṇi Sēthu Pārvathi Bhāi whose inspiration and support was of inestimable value to the cause of reform has contributed largely to make the proclamation a splendid success. The reform has created a healthy and vigorous spiritual life and is helping the advancement of solidarity among the various classes.

It will be clear from the facts stated in the beginning of this chapter that temples occupy a prominent place in the religious life of the Hindus. Several are the gods and goddesses worshipped by the devotees; but all of them are but different forms or manifestations of divine energy and immanence. There are numerous temples dedicated to the several manifestations and in the same temple more than one deity is often worshipped. A description of the more popular deities must precede a description of the rites and ceremonies performed in the temple.

The prominent deities worshipped in Travancore are Vishnu, Siva, Ganapathi, Bhagavathi, Subrahmonya and Sāstha. There are images of Brahma in some of the temples, as for example, Mithrānandapuram and Valiya Sāla temples in Trivandrum. Though Brahma is universally regarded as one of the Thrimūrthis, his worship is not popular.

Vishnu is the Preserver and Protector of the universe.

"Without beginning and without end, an infinite eternal energy, he pervades all worlds, the unchanging fountain of all power so that the whole creation springs from him and disappears in him". "He



Janardana Swami Temple, Varkala.

is the infinite self (Āthman), the teacher of the heavenly powers, the unmanifest spirit of all matter, the soul of the universe with the All for his form. He is identified with the Brahman of the Upanishads under the symbol Tat, and he presides as the Beginner and the Ender over the sequence of the ages and the process of time. From creation to dissolution, from the darkness of primæval matter back to the undeveloped, once more shrouded in gloom, the mighty rhythm obeys his changeless form".

The conception of Vishnu is explained thus in Padma Purāṇam. "The whole of the Jegat is pervaded by Me in the form of Avyaktha or unmanifested, and I am therefore called Vishnu by the Munis. In the same way, I am called Vāsudēva because the Bhūtās or elements live in me and I am in them as their Lord. I am known as Sankarshaṇa by my devotees because I take them at the end to Avyaktha, and known as Pradyumna by those devotees who wish for progeny, because I take different and various forms according to their desire. In this Lōka, I am alone independent excepting Hari and Hara and I am therefore known as Anirudha". Nārāyaṇa is Hari, the Lord and soul of the universe. He is the eternal, blissful and bright Āthma and Purusha. In him is constituted all that is seen or heard, external or internal.*.

He is generally conceived as having four arms each holding a particular symbol. The Chakra or circular weapon, the Pānchajanya or the conch shell, the Kaumōdaki or the club and Padma or the lotus flower. The Kausthubha is the chief jewel worn by him. The female energy associated with him is Lakshmi to whom mythology assigns the position of a wife. From the lotus which grows from his navel is born Brahma the Creator. Vishņu assumes many forms and is known by a thousand names. He is the god of love and humanity, the preserver of virtue and the punisher of evil. Vāmana, Parasurāma, Řāma and Krishņa are his

[·] Nārāyaņopanishad.

incarnations in human form. In the earlier stages of evolution he has manifested himself as Fish, Tortoise, Boar, Man-lion.

The important Vishņu temples are:-

- 1. Ampalapula.
- 2. Thiruppathisāram.
- 3. Thiruvattar.
- 4. Trivandrum.
- 5. Thiruchengannūr.
- 6. Thiruppuliyūr.
- 7. Thiru Aranmula.
- 8. Thiruvalla.
- 9. Thiruvenvandur.
- 10. Thrikkodithanam.
- 11. Thirukkākara.
- 12. Thirumulikulam.
- 13. Thiruvārpu.
- 14. Varkala.

Śivā's functions are innumerable and his nature all-comprehensive. But there are five prominent characters of Śiva. 1. He is the impersonation of the dissolving and disintegrating powers and processes of nature. 2. The impersonation of the eternal reproductive power of nature perpetually re-integrating after disintegration. 3. Śiva is the typical ascetic and self-mortifyer (Yōgi, Thapaswi) who has attained the highest perfection in abstract meditation and austerity. 4. Śiva is a contemplative philosopher and learned sage. 5. Śiva is exactly the opposite of an ascetic and philosopher, wild and jovial, the lord of dancers.

"He (Siva) has sometimes five faces, sometimes one face, and always three eyes, which are thought to denote his insight into past, present and future time. The third eye is in his forehead. A moon's crescent above it marks the measuring of time by months, while a serpent round

his neck denotes the endless cycle of recurring years and a second neck-lace of skulls with numerous other serpents about his person symbolises the eternal revolutions of ages and the successive dissolution and regeneration of the races of mankind. His body is generally covered with ashes and his hair thickly matted together and gathered above his forehead into a coil. On the top of it he bears the Ganges the rush of which he intercepted in its descent from Vishņu's foot, that the earth might not be crushed by the falling stream. His complexion is sometimes white, from the reflection of the snows of Kailāsa, sometimes dark, from his identification with the dark destroyer of time (Kāla). His throat is blue from the stain of the deadly poison which would have destroyed the world had not Siva in compassion for the human race undertaken to drink it up, on its production in the churning of the sea. Nandi the white bull is his vehicle, and images of it are often placed outside his shrines and probably typify generative energy. He carries a thriśūla or three-pronged trident thought by some to denote his combining in his own person the three attributes of Creator, Destroyer and Regenerator.

"The conceptions of Ardhanārīśwara combines the conception of Śiva and Śakthi and symbolizes both the duality and unity of the generative act and the production of the universe from the union of two eternal principles according to the Sānkhya and Vēdāntha systems. According to the Purāṇās, there are eight principal manifestations of Śiva called Řudřa, Bhairava, Ugra, Iśwara, Mahādēva, Paśupathi, Śarva and Bhava. Śiva's dance suggests how easily, and how rhythmically, he performs his five functions of making, preserving, destroying, judging and purifying. And his dance in the burning ground may sometimes carry the message that God becomes most real to men in the solemn hour when they part from their dead".

The important Siva temples in Travancore are:-

- 1. Śuchindram.
- 2. Thirunandikkara.
- 3. Śrikantēśwaram.
- 4. Valia Śāla.
- 5. Śivagiri.
- 6. Vettikkavala.
- 7. Vaikom.
- 8. Ettumānūr.
- 9. Chengannūr.

Dēvi, the personification of female energy, is the source of all divine and cosmic evolution. The Dēvi Māhāth-

mya says that Dēvī takes three forms, Mahā Lakshmi, Mahā Saraswathi and Mahākāļi, representing the Sāthvika, Řājasa, and Thāmasa attributes or Guṇās of Prakrthi. She represents the ultimate knowledge of the Absolute. She is variously named according to her age. "Thus when she is worshipped as an year-old baby she is known as Sundhya. She is conceived to be a two year old baby as Saraswathi, if of seven years, Chandika, if of eight years Śāmbhavi, if of nine years Durga or Bāla; of ten years of age Gouri, of thirteen years Mahā Lakshmi, and sixteen Lalitha"*.

"In the case of Siva's wife the cultus offered to her has a two-fold character corresponding to her mild and fierce aspect. In the first case she is associated with Siva, the auspicious, and is worshipped under the names of Gouri, Pārvathi, or Amba in a public manner with rites and ceremonies not differing from those which are observed in the case of the consorts of Brahma and Vishņu. In the fierce aspect she is mentioned as presiding over other minor goddesses controlling epidemics, sickness and evil spirits, and is worshipped under the names of Mahākāļi, Chāmundi, etc., in accordance with Thānthric rites".

^{*} Hindu Iconography, Vol. I, Part II, Page 332.

Cape Comorin.

All the different manifestations are conceived as flowing from Mahā Lakshmi who, according to the Mārkandēya Pufāṇa, is the supreme source of all powers, all the gods and goddesses being her manifestations. "If the image of the Dēvi is such as is made to stand by the side of the image of her consort, she has generally only two arms. Some times six arms are met with. In the latter case she would wield in four of her hands the Pāśa, Ankuša, Śankha and Chakra, the two remaining hands being held in the Varada and Abhaya poses."

The chief temples of Devi are:-

- 1. Kanyākumāri.
- 2. Mandakād.
- 3. Śārkara.
- 4. Ananda Vallīswaram.
- 5. Chengannūr.
- 6. Mullakkal.
- 7. Chettikulangara.
- 8. Shērthala.
- 9. Kumāranallūr.

Ganapathi is conceived as the elder son of Siva and Pārvathi. He is the god of prosperity. "What Ganapathi really represents is a complex personifica-Ganēsa. tion of sagacity, shrewdness, patience and self-reliance, of all those qualities, in short, which overcome hindrances and difficulties. He is before all things the typical embodiment of success in life; with his usual accompaniments of good living, plentiousness, prosperity and peace". At the beginning of ceremonies and undertakings he is invoked. He has the head of an elephant which denotes shrewdness or wisdom, with four arms holding an elephant-hook, a noose, a mace (or lotus) and a modaka or cake, one in each hand. His vehicle, the rat, is emblematical of sagacity. "Gaņēsa is the ākāśic part of Śiva looked upon as the lord of the universe, perhaps to

represent him as the vast expanse which is everywhere and encloses all things; his belly is made so capacious as to contain in it the innumerable thousands of modaks—round, ball-like cakes—which probably represent the various beings in the universe floating in the ocean of $\overline{A}k\overline{a}$ or ether. The Padma Purāṇa, however, explains the modaka to be the symbol of mahābudhi, supreme wisdom".

He is the remover of obstacles. His images are found in almost all temples.

Subrahmonya is also regarded as the son of Siva and He is usually called Murugan or Velavan. He Pārvathi. is a warrior god victorious over demons Subrahmonya. and Asuras but kind and affable to the worshippers. In the same way as he typifies valour and courage so also is he the ideal of idyllic love. He is regarded as the commander in chief of the Devasena and the embodiment of wisdom. His vahanam is the peacock and he carries the spear known as Vel. He is also known as Shunmukha with six faces, the six heads representing the six rithus or seasons, the twelve arms the twelve months, the Kukkuda or the fowl the harbinger of the rising sun, and the peacock whose feathers represent a marvellous blending of all colours represents the luminous glory of the sun. Subrahmonya is depicted as having two wives. Vally and Devayani, who like himself grant the worshippers good things of the life if pleased. The temples at the following places are dedicated to Subrahmonya:-

- 1. Haripād.
- 2. Udayanāpuram.
- 3. Uļļūr.
- 4. Thampanūr.
- 5. Kumāra Koil.
- 6. Mannam.
- 7. Marunkur.

Śastha is known also as Aiyappan or Harihara Puthra. Harihara Puthra means the son of Siva and Vishnu, Vishnu having assumed the form Sāstha. of a woman. The name Śastha implies power to protect. He is the special guardian of the mountainous tracts, giving immunity to his worshippers from attack from wild beasts. Gopinatha Rao says:- "The deity Ārya, Śāstha or Hariharaputhra, so well-known to the Drāvidās, is not familiar to the inhabitants of Northern India. Even in the Dravida country he is the favourite only of the Malayāļam people. The country of the latter possesses as large a number of temples of Śāstha as the Tamil country has of Subrahmonya. He is considered by them (the people of Malabar) as the guardian of the land and as such eight mountain tops along the western ghats are surmounted by eight temples in which are set up eight images of Śāstha to protect the country on the west of the mountain ranges from all external evils and misfortunes. The attributes applied to him, such as the rider of the white elephant, yōgi, the protector of Dharma, coupled with the significance of Buddha applied to Śāstha in the Amarakosa, incline one to conclude that Buddha as conceived and worshipped in the Tamil country was ultimately included in the Hindu Pantheon and a puranic story invented for his origin at a later period of the history of Hindu Iconology".

No other part of India is so rich in its wealth of shrines as Travancore. A hundred years back their number was very much larger. At the time of Ward & Conner's survey there were 21,658 temples. The latest Census Report gives their number as 9,250. These religious institutions have had a very long history. In olden days they were not only places of worship but also centres of civic and political activity, the rendezvous of discussion and debate over public questions, secular as well as spiritual. The consolidation of the country and the

establishment of a strong central authority imposed great restrictions on their activity, but so far as religious life is concerned the temples have had the advantage of legitimate support from the Government in conserving their properties, regulating their management, and enlivening the offering of prayers and the celebration of the usual festivals. The temples are situated mostly on favourable sites either on the tops of hills, on the banks of lakes, rivers or rivulets or on the sea-shore, sorrounded by majestic trees and often commanding a magnificent scenery. Formerly they were built of wood of which there was an abundant supply in this land of luxuriant forests. But now all the important temples are of stone.

The Hindu Śāstras prescribe in elaborate detail the rules for the construction of shrines. The Mānasāŕa and Suprabhēda Āgamā are among the authoritative works dealing with templeconstruction. The three common styles are:—

- 1. Nagara with its quadrangular Vimana,
- 2. Vesara in which a circular Śikhara crowns the Vimāna above the neck, and
- 3. Drāvida in which an octogonal or hexagonal roof crowns the Vimāna.

From the selection of the site to the consecration of the image is one succession of religious ceremonies. The best sort of ground should abound with milk trees full of fruits and flowers. Its boundary should be of a quadrangular form, level and smooth, with a sloping declivity towards the east, producing a hard sound, with a stream running from left to right, of an agreeable odour, fertile, of a uniform colour, containing a great quantity of soil, producing water when dug to the height of a man's arm raised above his head, and situated in a climate of moderate temperature. The ground possessed of qualities directly opposite to those mentioned above is the worst, and that which has the mixed nature is the middling.* The idea is that the gods

^{*} Ramraz' Essay on the Architecture of the Hindus.

appreciate the beauty spots of nature which feast the eyes and the other senses and contribute to stimulate devotion. The site having been selected, the ceremony of Bhūmi Parigraha is performed. "It consists in ploughing the land, sowing the seeds, the grazing of the crop by cows and the assembling of Brahmans. The next important step is the ascertaining of the cardinal points for which elaborate methods are prescribed. When the directions have all been marked out on the spot with thread mark the spot should be further sanctified by feasting Brahmans. The underground impurities, such as thorns, etc., have then to be removed. The ceremonies which follow the cleansing and purification of the ground are collectively styled 'Vasthuyaga'. This consists, according to the Gobhila Grihya Sūtra, in establishing the sacrificial fire in the middle of the site and the performance of sacrificial rites. According to Aśwalayana a square or oblong portion of the land has to be measured out and prepared for the sacrifice after which follows an elaborate ceremony".* Then follows the laying of the foundation stone, the śilānyāsa, and the work of construction is proceeded with.

The temple consists of various parts. The shrine, the sanctum sanctorum, is called the Śrī Kōvil, which may be square, oblong or circular in shape, and Portions of a temple. consists of one or two storeys. The Śrī Kōvil is surrounded by five successive boundaries called the 'Panchaprākāras' which are:—

- 1. The Antharmandalam, immediately surrounding the Śrī Kōvil.
- 2. The Anthahara, which is usually called the Nālampalam.
- 3. The Madhyahara, otherwise known as Vilakku-mādam.

[•] History of Kēraļa, K. P. P. Menon, Vol. IV, pp. 25-27.

- 4. The Bāhyahaŕa, representing the Belivaṭṭam in large temples.
 - 5. The Maryada or outer wall.

The following extract from the Travancore Dēvaswom Manual is instructive.

"The above divisions are important only for ceremonial purposes. The ordinary worshipper who visits a temple has, first of all, to pass through the main outer entrance or Göpuram. This may consist of an ordinary doorway with a small roofing over it or one with a superstructure comprising rooms and verandah or an elaborately constructed tower several storeys high. Passing the Gopuram the worshipper comes to the Anakottil where the elephants are brought to take the deity in procession on festive occasions. The Śrībeli pura (in the case of large temples) or Pradakshina vali starts from one end of the Anakottil and after going round the temple rejoins it at the other end. From the Anakottil the devotee enters the Belikkalpura in the middle of which is located the Valiya Belikkal. Between the Belikkalpura and the Anakottil is the place for the flag staff or Dhwajam. The doorway from the Belikkalpura gives entrance to the 'Nalampalam' representing the platforms, etc., on either side of the corridor leading from the doorway, the Thidapally or Kitchen, etc. The Nalampalam is generally bounded on all sides by the 'Vilakkumadam' or structure of lights".

Between the Nālampalam and the Śrī Kōvil is situated the Mandapam which is mainly intended for Kalaśapūja, etc., in connection with purificatory and other ceremonies in temples. The flight of steps that leads to the Śrī Kōvil is called the 'Sōpānam'. In some temples there is a raised platform in front of the Śrī Kōvil and attached to it. This is called the Mukhamandapam. So also, in most of the important temples there is an inner circle within the Śrī Kōvil, the sanctum sanctorum, called the Garbhagraham wherein the deity is installed. In some of the bigger

temples there is a separate structure known as the Kūthampalam for the exposition of puranic stories and didactic principles. In others the corridors are used for the purpose. There is in every temple a well inside the Nalampalam kept free from defilement of any kind to supply water for bathing the idol, for preparing the offerings and other purposes connected with the rituals. No worshipper is permitted to enter the inner precincts without taking bath or without clean clothes. The officiating priests alone can touch the idol or enter the Garbhagraham. Prasāda which consists of holv ashes, sandal paste, flowers, etc., is distributed to the worshippers from outside the Śrī Kōvil. The pāyasam and other sweets offered to the deity in some of the temples are very delicious and are greatly appreciated by all. The Palpāyasam at Ampalapula, the Thulāppāyasam at Haripād. the Usha at Thiruvārpu, the Unni Appam in Vālappally and Thadiyappam in Shērthala are some of the prominent In the temple of Śrī Padmanābha Swāmy, examples. Trivandrum, there is a large variety of sweets and other edible things prepared in abundance.

Almost all the temples are now open to all Hindus irrespective of sex, age or social position, the only exceptions being a few under private ownership and management. But the entry of persons subject to domestic or personal pollution is prohibited. In certain temples women are not allowed to enter the Nālampalam, while from other temples even males of certain savarņa castes like the Kshatriyas are excluded. The causes of such prohibition are buried in oblivion; however, the exceptions are so few that they may be considered negligible. But the practice still continues.

Formerly the Avarnas, though numerically a large community, were under the ban. But the Temple Entry Proclamation has removed all invidious distinction on the ground of caste.

The images belong to one or other of the prescribed classes. One division of the images is that into Achala

The Achala images are usually made of stone and Chala. and in certain cases of Kadulisarkara, Classification of a preparation in which limestone is the Images. chief ingredient. They are called Mula bimbams and are fixed inside the Śrī Kōvil. The Mula bimbams are in one of three postures, the sthanaka or standing posture, the Asana or sitting posture and the Śayana or the reclining posture. It is only Vishnu who is represented in the last. The Chala or movable images are usually made of metal but wood, stone and ivory are also used. Being portable they are generally used in Śrībelis and processions.

Another division is into Ugra or terrific and Saumya or pacific. Detailed instructions are given in the Agama Śāstras in regard to the shapes in which the images of the various deities and their different manifestations should be moulded and the decorations to be attached to them. Worship in the Kēraļa temples is not always confined to the images of gods and goddesses alone. Weapons such as the Trident, Sword, etc., which are meant to represent the gods who habitually carry them are also consecrated and pūjas are offered to them in certain temples. Yanthras or mystic diagrams drawn on stone or metal, such as the Śrī Chakra, sacred to the Dēvi, are found installed in place of the deity in some important Dēvaswoms.

Trees associated with divine incidents like the famous Venga tree in the Kumāra Kōvil in South Travancore, the sacred Konna in the Suchīndram temple, are looked upon as sacred objects for pūja and worship. The Sālagrāma pūja is also common in Vaishņava temples. A Sālagrāmam is generally a flinted amonite shell which is river-worn and thus rounded and beautifully polished. The river Gandaki which is one of the well-known tributaries of the Ganges is famous for its deposits of Sālagrāmam. The stone has a hole, through which are visible several interior spiral grooves resembling the representations of

the Chakra or discus of Vishņu; and these are in fact considered by the people to be the representation of the discus of Vishņu.

The worship in Travancore temples, as in those of Kēraļa in general, are agamic in character. The shrines are consecrated with manthric and thanthric rites. The rituals are of a very elaborate nature prescribed by the Thanthras. By far the greater number of temples in the State are governed by the Malayala Thanthram; Paradēsa Thanthram being followed only in the Shenkötta taluk and some portions of the Suchindram Dēvaswom District, which are contiguous to the Tinnevelly district of the presidency of Madras.

The number of daily pūjas varies in different temples according to the importance of each. The maximum number is five and the minimum one. The daily pūjas are called Nityanidānam. Under this head fall the abhishēkam, pūja, nivēdyam, namaskāram, śrībeli, etc. The daily routine in a temple commences with Palliyuṇarthal or waking up the deity, which generally takes place between 3 and 4-30 in the morning. The removal of the Nirmālyam or what remains of the offering of flowers &c. of the previous day follows next. After this comes the abhishēkam or washing the image. The feeding of Brahmans within the temple as Kriyāngam in connection with Nivēdyam is called Namaskāram.

The worshippers also offer Valipādūs which consist generally of nivēdyams, archanas, lighting, feasting Brahmans, etc. In some temples there is provision made for the reading of Řāmāyaṇam, Bhāgavatham, &c., the expenses being often defrayed by voluntary donations of pious worshippers. The Kāṇikka or the depositing of coins is a common practice in most temples. Ornaments and other valuables are also dedicated. Each temple has its own traditions in regard to particular methods of propitiation of the deity. In Ēttumānūr temple it is the payment of money, in the Vaikom temple it is the feeding of Brahmans,

while in Thiruvalla the performance of the Kathakali dance is a favourite valipadu. Mulukkappu or the artistic coating of the idol with sandal paste is invariably an important valipadu in many temples.

The five daily pūjas referred to above are Ushappūja, Ethirt'ha Pūja, Panthīrați Pūja, Uccha Pūja and Athālapūja according to the Malayāla Thanthram. In addition to these panchagavyam and navakam, pūjas and abhishēkams after panthīrați and before Uccha pūja, are performed in most of the important Dēvaswoms. The proper time for the performance of the daily pūja is noted below.

- 1. In temples where there is only one $p\overline{u}ja$, it must be performed as far as possible between 6 A. M. and 10 A. M. or when this is not possible, between 5 P. M. and 8 P. M.
- 2. In temples where there are two pujas the first must be performed between 6 A. M. and 10 A. M. and the second between 5 and 8 P. M.
- 3. In temples where there are three pujas the morning puja must be performed before 6-30 A.M. Uccha puja between 10 and 10-30 A.M. and the Athula puja between 7 and 8 P.M.
- 4. In temples where there are four pujas the first must be performed by 6-30 A. M. The second by 8-30 A. M. The Ucchapuja by 11 A. M. and Athala puja between 7 and 8 P. M.
- 5. In temples where there are five pūjas the Ushappūja must be finished at 6-30 A. M. the Ethirt'ha pūja by 7-30 A. M., the panthīraṭi pūja by 8-30 A. M. Ucchapūja by 11 A. M. and the Athāla pūja between 7 and 8 P. M. If in any temple it has been the practice to conduct any of the above pūjas at different times in accordance with recognised māmuls, such different hours are permitted. The bimbam is taken in procession round the temple at the close of the morning, noon and evening services. Pūja is offered to the auxilliary deities also in the prescribed manner,

The foregoing is the general account of the pūjas in the temples. In the Śrī Padmanābhaswāmy's temple, Trivandrum, as many as twelve pūjas are performed daily. The quantity and the variety of the offerings made are also larger there than in any other temple.

The Dīpārādhana or the waving of lights and the burning of incense is done three or four times a day; that performed in the evening after 6 P. M. is the most largely attended.

Māsavišēsham consists of special rites, etc., conducted on certain specified dates in the months, as on :—

- 1. Certain week days such as Tuesday, Friday, etc.
- 2. Thithis or specified days in the bright and dark days of the lunar month, such as pradosham, shashti, etc.
- 3. Days specified with reference to the asterism, such as, Kārťhika, Thiru Ōṇam, etc.
- 4. Āṭṭaviśēsham. These are special ceremonies conducted on certain fixed days in the year, such as Śivarāthri, Vishu, Ashṭami Řōhiṇi, etc.

In most of the major temples there is an annual Uthsavam. In some, however, there are two, three and even four

Uthsavams a year. The Uthsavams last generally for 10 days, though in certain temples the period varies from 8 to 28 days. The function consists of special services within the temple, feasts and processions. Exhibitions of various arts are conducted for the benefit of the devotees and the delectation of the general public. During the processions the Chala images are taken round in circumambulation along the pradakshinavali in the temple, on the back of caparisoned elephants to the accompaniment of nagaswaram and other music.

Occasional ceremonies come within one or other of the following classes.

1. Ashtabandha kalasam which is the ceremony for renewing the cement (Ashtabandham) and fixing the image in the pedestal (PIṭam).

- 2. Navikaranam. This is conducted when the image has to be shifted from one place to another or where a new image has to be substituted in place of the old which has become unfit for use and in such other cases.
- 3. Dhwaja prathishta. This ceremony is performed in connection with the installation of permanent dhwajams (flag staff) in temples.
- 4. Jiodhwasam. This is the rite performed when the dhwajam or Valiyabelikkal is so damaged that its removal is found necessary.
- 5. Jīodhwasam of Śrībeli bimbam is performed when the Śrībeli bimbam is so damaged that its rejection becomes necessary.
- 6. Sthūpikāsthāpanam. This rite has to be performed when the sthūpika is fixed over the Śrī Kōvil.
- 7. Expiatory rites on account of nimitham. Certain circumstances (including natural) are treated as causing pollution to temples. Purificatory ceremonies are prescribed to prevent the destruction of the power of the bimbam to reflect divine essence. Expiatory rites are performed to counteract the evil effects of those happenings.

We thus find that the worship in temples is regulated in strict accordance with the rules laid down in the Agama Sāstrās. Form is in religion the twin sister of faith and the temples in Travancore present a continuity of tradition which cannot fail to be a stimulus to a well-regulated religious life. The essentials of discipline are the same in private temples as well as those under the management of Government. The head of the Dēvaswom Department is responsible for the proper conduct of the temple affairs but his authority is confined to the administrative side; the spiritual questions being decided by the Thanthris and other men of religion. The Thanthris are the arch-priests of Malabar temples. Ceremonies of exceptional importance, such as consecration of the idol, are performed by them. The

office is generally hereditary. The Thanthris are expected to have a correct knowledge of the details of worship, the performance of ceremonies and all kindred subjects. They have the authority to correct the mistakes of the priests. They are consulted in all matters connected with the Dēvaswoms so far as the spiritual side is concerned.

The laws and customs of the land, the checks and balances in the management of temples and an administration rendered efficient by the personal interest of the ruling Mahārāja have combined to turn the temples in the State to the spiritual advantage of all classes of Hindus. Mahāthma Gandhi:--"I certainly left Travancore with spiritual treasures that I have newly discovered. For, what I saw there was beyond my expectation and more than delighted my heart. The temples gave me a loftier and nobler idea of temples and temple worship. I had visited temples before in North India but I had not done so in a devout spirit, and they had failed to stir me. But the majestic Travancore temples spoke to me. Every carving, every little image, every little oil lamp had a meaning for me." He adds:-"These temples are so many bridges between the unseen, invisible and indefinite God and ourselves who are infinitesimal drops in the infinite ocean. We the human family are not all philosophers. We are of the earth very earthy, and we are not satisfied with contemplating the invisible God. Somehow or other we want something which we can touch, something which we can see, something be-these temples with faith in them, you will know each time you visit them, you will come away purified and with your faith more and more in the living God." Some of the import ant temples in the State are described below.

The temple of Bhagavathi at Kanyākumāri is one of the oldest. In the *Taitariya* Upanishad mention is made of Kanyā Kumāri. Ptolemy, A. D. 150, and the author of

the Periplus, A. D. 85, also make references to it. The legend is that goddess Śrī Pārvathi chose the Cape as the place of her rest after slaying Bhandāsura and Mūkāsura. The story of the origin of the temple is interesting. It says that Śiva the god at Śuchīndram, wanted to marry the goddess Pārvathi but the negotiations having broken off the rice and other provisions brought there for the feasting were converted into sand. This, it is said, explains for the different kinds of sand found in the locality. The temple has been regarded as very sacred by the Hindus from ancient times. Bathing in the sea there and worshipping the goddess Kanya are believed to be efficacious in washing away all sins.

The temple comprises a spacious rectangular ground in the very foreshore which is walled off on all sides. Within the enclosed court is a pile of buildings in the centre of which is the sanctum of the goddess. innermost shrine which contains the deity does not preserve the old structure. It was probably renovated years ago and there are no inscriptions on the walls to furnish a clue as to when it was repaired or renewed. Neither is there any sculpture worth mentioning. Leaving a little room all round the walls of the auditum, a covered inner circuit runs and the floor of this part is on a higher level than that of the intervening space. On the south-west corner of this circuit there is a shrine of Ganesa facing the east. The outer walls of the surrounding verandah on the south and north sides are prolonged on the east, i.e., in front but are screened by cross walls put up on either side of the entrance into the central shrine provided with openings, which lead one from the inner court to the surrounding parts of what is known as Manimandapa. This last is erected in front of the garbhagfaha and is supported by six inscribed cylindrical pillars, four of which are placed at the four corners of the Manimandapa and the two remaining ones are fixed on either side of the entrance into

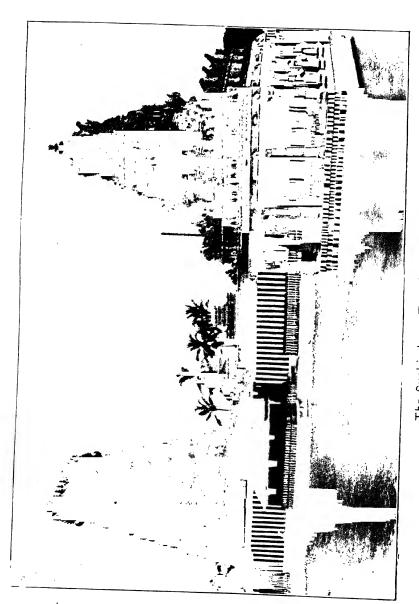
the auditum. Brick walls erected on the north and south sides, parallel to the prolonged portions of the outer $\operatorname{praka\'ra}$, separate the space between into small chambers. The portions so walled on the south contain two small rooms, one within the other, and they seem to have once served the purpose of Karivēlam (safe-room). The portion on the north furnishes two rooms one of which serves for keeping the vessels used in worshipping and the other enshrines the Uthsava image.

The Sabhāmandapa or assembly hall is in front of the Manimandapa. On either side there are rows of pillars lightly sculptured. The structure is not very ancient but is of importance for the belt of sculpture representing puranic stories. The easternmost portion of the prakara is screened by a cross wall with an entrance leading into the second prākāra very near the dhwajasthambha. There is an entrance on the northern side leading to the same prākāra. The second or Śrībeliprākāra is broader than the first and better lighted. It gets its name from the circumstance that beli stones are kept all round and the image of the deity is taken in procession daily through it accompanied by a drummer, a torch bearer, and a santhippotti which last offers flower and rice on the beli stones. On the southern side of this prakara are the kitchen and the namaskāra mandapa, while on the northern side is the shrine of Thyagasundari. Almost in the middle of the north prākāra there is an entrance with a small raised platform on either side. Outside this entrance there are two pavilions one of which serves the purpose of the Uññōlmandapa. Thousands of pilgrims flock to this place on New Moon days for religious worship and for performing śrādha. It is the only place in the whole of India where one could see the sun both rise and set in the sea.

Just about a mile from this temple is another ancient shrine, the Guhanāthaswāmi temple.

Suchindram four miles to the south of Nagercoil is one of the most important temples in the State dedicated to Siva. The following is the traditional Such indram account of its origin. Sage Athri and his Temple. wife Anasuya renowned for her chastity were doing penance in a hermitage near the modern Suchindram. The Thrimurthis desirous of testing the virtue of Anasūya came here in the guise of Brahmans when Athri happened to be absent from home and requested Bhiksha (alms) of her. The rules of Hindu hospitality being imperative in regard to the respectful treatment of a guest, she received them cheerfully. When they were seated at dinner, they told her that they had taken a vow not to eat anything which was served by a woman who had her garments on. Finding herself in that predicament but confident of her own purity, the holy matron sprinkled a little holy water upon them all with a prayer to the Almighty that they be immediately converted into innocent babes. Her prayer being granted she fed the babes with milk and nursed them. While she was thus fondling these children, Pärvathi, Lakshmi and Saraswathi came to the spot in search of their lords. Finding them in this pitiable condition they gave themselves up to severe penance. The Lord Mahādēva appeared before them and granted their prayer. The three babes were converted into the three gods and Anasuya found before her the Thrimurthis, Brahma, Vishnu and Siva in their own forms. She fell at their feet, asked forgiveness for having transformed them into children, and prayed that she should have three similar children. Accordingly, a son called Dathatreya was born to her, who combined in himself the powers of the Thrimurthis. It is in commemoration of this, so the story goes, that all the three deities, Brahma, Vishnu and Siva are worshipped in this temple.

The place is also famous as the one where Indra was relieved of the curse inflicted on him by Sage Gauthama for



The Suchindram Temple and Tank.

his disgraceful conduct towards Ahalya; hence the name Suchindram (literally, the place where Indra was purified). Indra thereupon built this temple and dedicated it to Sthanulingam as a mark of gratitude. It is believed that Indra descends from his celestial abode and offers worship every night.

It is said that Parasurama on his arrival here constructed towers and mandapams to the temple and arranged for the celebration of the annual festivals. The management was entrusted to the Brahmans, while eleven Sivadwijas were commanded to do personal service to the deity.

In point of importance it is hardly second to Śrī Padmanābhaswāmy's Temple and in the Neets or warrants of appointment issued by the Mahāfāja to the Dewan express directions are given to look after the proper management of this temple, the actual words being "Suchindram and other temples". There are two important festivals one in the month of Mēdam (April) and the other in Dhanu (December). The latter is the more important and is largely attended by people from all parts of Travancore and beyond. It lasts ten days. During this period Brahmans are sumptuously fed. On the ninth day the huge temple cars are taken through the streets round the temple. car procession is an important festival. Its object being the welfare of the State, the Mahārāja is expected to fast on that day until the cars return to their original position, the information being conveyed by telegraph and sign guns.

This temple contains the largest relics of antiquity. Until the middle of the last century people used to resort to this temple for the ghee ordeal. Among the persons who have taken oaths in this temple was a former ruler of Cochin.

The temple is situated in a spacious court enclosed by high walls with a covered pradakshinavali or path-way surrounding several minor shrines, mandapas, halls and subsidiary buildings. It faces the east and has on that side

an outer gate surmounted by a lofty gopura of seven storeys crowned with pinnacles. The entire gopura and more particularly the jambs of each of the doorways are tastefully decorated with fine figures of deities all of which bear rich and appropriate ornamentation. At the centre of the entrance are the images of Siva and Pārvathi, seated on a bull, flanked by Vishnu mounted on Garuda on the left and Brahma riding on his vahana, the hamsa, on the right. The Vyāli-mounted canopy overshadowing the image of Narasimha, which crowns the topmost storey in the centre, is handsome. In the back view of the tower are the Śikhara of Uchamandapa and the two dhwaiasthambhas. sculpture which consists of well-wrought pillars and attractive images of Gods adds to the beauty of the interior. The pillars exhibit an exubarance of floral work in their pedestals, head and thorana work in the shafts and adhapadma petals at the capitals. Numerous images of deities are accommodated in the niches on the walls. In the centre is a standing image of Vishnu holding the conch, discus and club in three of the hands, while the fourth is stretched out in the abhaya pose. It is flanked on the right by a standing figure of Garuda in worshipping attitude. One of the friezes at the bottom contains sculptured forms of animals such as the lion, tiger, bear, elephant, deer, ram and monkey. In the centre there is also Vishnu, the flanking figures being Indra having in his hands the Vajrāyudha and the lotus flower and Varuna holding a sword and noose standing by the side of his vahana, the makara. There is another representation of a well proportioned and attractive figure of Vishnu in sitting posture, holding the conch and the discus in two of his hands. It is canopied by a five-headed cobra.*

Though many of the earlier structures of this temple do not exist at present, yet there are parts which are attractive to a student of ancient history. The oldest

[•] The descriptions of temples and their architecture are mainly based on the records in the office of the Director of Archaeology.

inscription in the temple, on a rock on the south-west corner near the Kailāsa shrine shows that there were in the temple shrines of Ten Thiruvēngadathāļvār, Amarabhujanga Perumāļ and Suchīndramudaiya Nāyanār.

Other structures besides the gopura already noticed are the large hall called Senbakaramanmandapa, the Chithrasabha, the pillared portico erected near the dhwajasthambha, and the Garuda and Nandi mandapas on the east side. The Chithrasabha was built in A. D. 1410 and the Senbakaramanmandapa was in existence prior to A. D. 1471.

It may be said here that in the decorative treatment of these structural monuments, which are nearly 500 years old, the sculptors have indulged in utilising a large number of pillars noted for their variety of shapes and forms, richness of ornamentation, fine modelling and intricate chiselling.

There are two major deities in this temple, one Sthānunāthaswāmi (Śiva) and the other Thiruvēnkiṭappa (Vishņu). In this temple are seen some of the finest examples of wood and stone sculptures. The images of Chēramān Perumāl and two Nāyanārs and also of Śiva and Pārvathi and Śaivite saints and above all the fine stone sculptures illustrating the stories of the Mahābhāratha and Bhāgavatha are a marvel of workmanship.

The Adikesava Perumal temple at Thiruvattar is considered to be of equal sanctity as that at Trivandrum.

The god Adikēśava is stated to have taken his rest at Thiruvaṭṭār after having killed an Asura. Thiruvaṭṭār is one of the 13 Divyadēśams, places sacred to the Vaishṇavas. According to tradition the deity here is believed to have been worshipped by Chandra and Paraśurāma. The Vishṇu temple here can claim to have a considerable antiquity. The Purāṇanūru, a famous Tamil classic, has a verse mentioning Thiruvaṭṭāru as the headquarters of an old chieftain Elini Adan, famous for his

extreme munificence and patronage of men of letters. The Vaishnavite saint Nammalwar has eulogised the sanctity of the temple in his Thiruvāimoli. From all these it may be inferred that the temple of Thiruvattar has been in existence for more than eleven hundred years. From an inscriptional record in the temple it is seen that the present shrine dates from the 12th century. In the inside of the temple we have epigraphical records of some of the Chola and Travancore The god Adikesava in this temple is a Śayana Mürthi stretched out on his commodious serpent bed. Some relics of old mural paintings of about the 15th century are seen in a damaged condition on the walls of the inner One of the Travancore kings, Adithyavarma has composed ten verses in Sanskrit called Avatharana Daśakam in praise of the god Keśava of Thiruvattar. The temple faces the west.

The Śrī Padmanābhaswamy temple at Trivandrum is one of very great antiquity and is held in the highest veneration. The temple is one of the 108 Trivandrum. shrines sacred to the Śrī Vaishnavas in India. The Vaishnavite saint Nammalwar among others has sung hymns in praise of Śri Padmanābha, the presiding deity. Formerly the management was vested in a committee known as Ettarayogam. It was composed of seven Brahman jenmis, one Nayar chieftain, and the ruling Mahāfāja who at that time exercised only half a vote. while the other eight members had one vote each. This means that the sovereign did not ordinarily interfere in the management but contented himself with a controlling voice when public interests required. The endowments bring in an annual revenue of more than Rs. 75,000. The ceremonies in this temple are conducted on a very expensive scale.

In the Agrasala attached to this temple Brahmans are regularly fed, two meals being given every day. It is

only the poor classes who take advantage of this public charity. On festive occasions such as the Uthsavams, the birthday of the Mahārāja and the Bhadradīpam ceremony the feasting is sumptuous.

One of the inscriptions in the temple states that king Bāla Mārthānḍa Varma, caused the temple of Śrī Padmanābha to be rebuilt from the vimāna down to the dīpaśāla and set up the Ottakkal Manḍapam as well as the images of god Śrī Padmanābha, Lakshmi, Bhūmi, and the serpent couch and performed the consecration ceremony. These works were commenced in 1729 and finished in 1733 A. D. The temple abounds in inscriptions and works of art such as paintings and sculpture. The paintings are executed purely in native style and are perhaps the latest record of indigenous paintings of the best sort on a somewhat large scale. These paintings depict different scenes from the Bhāgavatha, Mahābhāratha and Řāmāyaṇa. There is also a wealth of costly jewellery in the temple.

The traditional account regarding the origin of the temple is stated by V. Nagam Aiya as follows:—

"The spot where the Trivandrum temple now stands was formerly a jungle called Ananthankādu. In this jungle lived a Pulaya and his wife who obtained their livelihood by cultivating a large rice-field near their hut. One day, as the Pulaya's wife was weeding in her field, she heard the cry of a baby close by and on a search found it to be a beautiful child, which she took to be a divine infant, and was at first afraid to touch. However, after washing herself, she fed the baby with her breast milk and left it again under the shade of a large tree. As soon as she had retired, a five-headed cobra came, removed the infant to a hole in the tree and sheltered it from the sun with its hood, as the child was an incarnation of god Vishnu. While there, the Pulaya and his wife used to make offerings to the baby, of milk and

conji, in a coconut shell. Tidings of these things reached the ears of the sovereign of Travancore, who immediately ordered a temple to be erected at the place."

There is another version of the origin of Padmanā-bha's temple in Trivandrum, which is handed down from generation to generation as a lullaby song still sung by the Brahman women in the course of their daily domestic duties. It is as follows.

"The Vilvamangalam Swāmiyār to whom is attributed the consecration of many temples in Malabar, used to perform his daily pujas to his salagramams. During the pūja he used to close his eyes for a long time in deep meditation of Mahā Vishņu, when a young child would interrupt him every day by displacing his salagramams and flowers and annoying him in a hundred other ways; but when the Swāmiyār opened his eyes, the child always disappeared. One day, finding the child's interruption intolerable, the Swamiyar in a fit of temper, while his eyes were yet shut, removed the meddling child by the back of his left hand. The child took umbrage at this and, before the Swamiyar could open his eyes, had told him that the child whom he had thus disregarded was none other than the deity that he had been intently praying to see, and that he could not meet him anywhere else than at Ananthan $k\bar{a}d$, a place of which the sanyāsi had not heard. The sanyāsi woke from his meditation, found everything was lost, and in his distress ran with all possible speed towards the direction which, he imagined, the child must have He now and then heard the distant jingling of the child's waist-ornament and saw where there was loose sand the little foot-prints of the child. After several days' running in this wise without satisfying the cravings of hunger or thirst, the Swamiyar heard the cry of a child in the wilderness. He repaired to the spot from whence it came and discovered a solitary Pulaya woman threatening her weeping babe with the words, "if you continue weeping

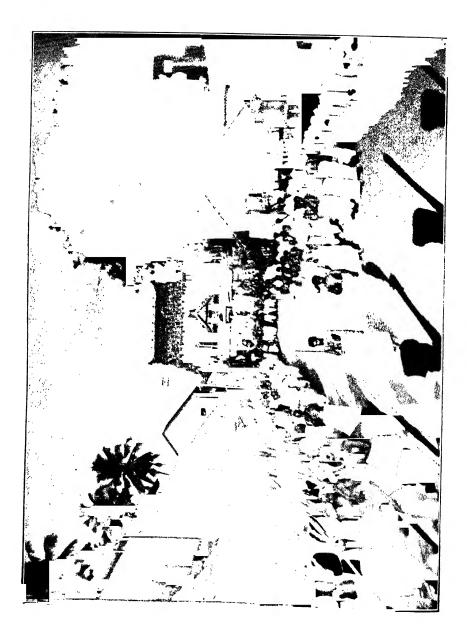
like this, child, I will throw you out into Ananthankād". The Swāmivār's joy at the mention of this name (Ananthankād) knew no bounds and on enquiry he was shown by the Pulaya woman the place which he wanted. Before he had gone a few paces more, the sound of the waist-ring bells was heard again and a huge Iluppa (Bassia longifolia) tree came down with a loud crash, which marked the spot of the deity's final rest. Vishnu was found lying on his Adiśēśha with all his four arms in splendour and serenity, extending from Thiruvallam to Thiruppapur with his middle portion at Thiru-ananthapuram or Trivandrum. Then the Swāmiyār was pardoned and blessed, and he prayed for the deity's contracting himself into a small compass so that he might offer his pujas and make his circumambulations easily. The deity shrank accordingly in compliance with the bhaktha's request and the Swāmiyār performed his pulas and pradakshinams to his heart's content. It is also said in this connection that the tree that fell indicating the spot of Vishņu's final rest was afterwards carved into the image of Vishnu in repose, the very same one that we now find inside the temple of Śrī Padmanābha at Trivandrum, and a temple was erected over it by the then Travancore king. It is also said that the coconut shell in which the Vilvamangalam Swāmiyār offered rice oblation to the deity is now represented by a golden bowl of the same shape in which even to-day rice offering is made to Śrī Padmanābha. The Pulaya woman who husked the paddy with the hand for oblation by the Swāmiyār was presented subsequently by the orthodox and munificent king of Travancore with a patch of paddy field for her family to live upon. This field is now called the Putharikkantam in front of the Eastern Fortgate, Trivandrum. And to this day it is the custom in Trivandrum that the Nampūthiri sanyāsins perform pushpānjali to Padmanābha in addition to the Pottis or pūjāris specially appointed for the purpose, and great

respect is shown them by the people as well as by the Mahārāja".

The greater part of the buildings in the temple are not of very great antiquity, though the place itself has been regarded as sacred and has been used as a place of worship from time immemorial.

The temple has as its functionaries two sanyasins, representatives of the Vilvamangala Matam, one Thanthri, four Nambis or archpriests (two for Śri Padmanābha's puja and two for Narasimha's and Krishna's) and fortyfour kiléanthikkar or assistants to the head priests. The Nampis on duty called the Valiya-Nampi and the Panchagavya-Nampi, make a permanent stay for three years in the houses assigned to them at Mithranandapuram close to the temple. The other two Nampis are also appointed for three years. They are ordinarily chosen only from certain specified families of North Malabar and South Kanara. The two sanyāsins are monks of the Nampūthiri The order being specially connected with the temple from the earliest period of its history, they are greatly venerated. Special matams to live in have been assigned to them at Mithranandapuram.

There are two Uthsavams celebrated annually, one in the month of Mīnam (March) and the other in Thulām (October), each lasting ten days and ten nights. On the first day the flag is hoisted with the prescribed solemnity (Kodi-yēttu). Every day, both in the evening at about 4 P. M. and in the night at 8 O'clock the images of Śrī Padmanābhaswāmy, Narasimhaswāmy, and Krishnaswāmy are taken in procession round the Śīvēlimandapam. The Mahārāja walks in front before the vāhanams in temple costume. Prominent Hindu officials in the town escort His Highness along, the temple courtyard being crowded with thousands of spectators. On the ninth night is a procession called the Palli Vētṭai (hunt) to a place a furlong outside the temple, which in the ancient days must have been thick



jungle infested by wild animals. The appearance of the mock-hunt is well kept up. The Mahārāja draws a how and shoots an arrow at a tender coconut placed there in symbolic significance. After the shooting the procession returns to the temple to the accompaniment of Nāgaswaram and the strains played by the military band. The bimbams are accommodated in a separate place and are taken to their original seats only after the Ārāt or the sacred bath which comes off on the next day.

The Arāt is an imposing ceremony. After the usual rounds in the temple, the himbams of the deities on different vahanams are carried in a grand procession to the Sankhumukhom beach. This procession also is headed by the Mahārāja walking all the distance, sword in hand, but in temple dress. The male members of the royal family also accompany. The Navar Brigade with their arms, banners flying and band playing, the state elephants and horses richly caparisoned, and the other paraphernalia of the State and the temple, all the Hindu officers of the State, the non-Brahmans in front of the Mahārāja and the Brahmans behind him, but all in front of the gods, swell the procession and add to its grandeur. An immense concourse of people of all castes and religions lines the roadsides to witness the procession. On reaching the beach, the vahanams are taken and placed in a stone mandapam. After sunset the images are taken to the sea and bathed, when the Mahārāja also makes his ablutions, after which a dīpāfādhana is performed. The festival closes with the return of the gods to the temple and the unfurling of the flag (Rodiyirakkam). This, the concluding portion of the Uthsavam, takes place generally by about 10 P.M. and forms one of the most charming and impressive items.

Besides the Uthsavam there is the Bhadradīpam which is celebrated twice a year in the months of Mithunam and Dhanu. It lasts for seven days. On the last day the ceremony of Thirumudi Kalasam is performed. The

Bhadradīpam was started by Mahārāja Mārthānda Varma. Once in six years the grand religious ceremony of Murajapam is celebrated. Between one Murajapam and another there would be twelve Bhadradīpams.

The Murajapam had its origin, like the Bhadracīpam, in the pious resolve of Mārthānda Varma the Great, to expiate the sins of war and annexation of territory and to pray for divine blessings for the prosperity of his kingdom. The ceremony had perhaps a secular object as well; for, when the leading Nampūthiri landlords and their followers are treated with recurring hospitality they would naturally get reconciled with the altered political status and transfer their allegiance to the conqueror. The first Murajapam was conducted in 1750 A. D.

The word Murajapam signifies a course of prayer—Mura means, literally, "a course of recitation", each course taking eight days, and japam means "prayer or chanting of Vedic hymns". The Murajapam consists of seven courses of prayers and connected rites and lasts for fifty six days, closing with a grand illumination in the temple called the Lakshadīpam or 1,00,000 lights. It attracts many thousands of people from different parts of India. For the japam only the Malayāla Brahmans are invited. They are treated with the special consideration due to guests. No non-Malayāla Brahmans can participate in the functions connected with the Murajapam.

There are four kinds of Japams to be gone through every day:

- 1. The Mura japam or recitation of the Vedas in the morning inside the temple.
- 2. The Manthra japam, also in the morning along with the Mura japam;
- 3. The Sahasranama japam or repeating the thousand names of Vishnu, also in the temple at 2 P. M.
- 4. The Jala japam performed in the evening in the PadmathIrtham tank in front of the temple.

The Vādhyāns superintend and see to the proper performance of all these japams. Formerly all Nampūthiris were eligible to be enrolled as reciters in the Mura japam unlike the Pōttis and Emprāns who had to submit themselves to a preliminary examination of merit. The Vādhyāns nominate the persons for the several japams and distribute the daily Dakshinas (fees) for the same. It is their duty to see that the Vēdas are properly chanted and the whole course of japams completed within the allotted time. Thus their presence is indispensable throughout the course of the ceremony. So is that of the Vaidikans in their capacity of purōhits or preceptors having control over their caste regulations.

From start to finish the prescribed formalities and solemnities are strictly observed. The preparations are elaborate. Just a year before the Murajapam, the astrologer attached to the Palace fixes an auspicious day for the commencement of the ceremony. His Highness then issues a royal warrant to the Dewan commanding him to make arrangements for the proper conduct of the same. The following is an English version of the warrant.

"We are pleased to forward to you herewith Ananthakrishna Jotsier's chārthu (memo or note) fixing Monday the 5th Vrischigam 1081 M. E. (1905 A. D.) in the asterism of Makha, on the 8th day of the last fortnight, when Nityayōga and Karana are Mahēndra and Varāha respectively, as the auspicious day to commence the Murajapam ceremony in Śrī Padmanābhaswāmy's temple at Trivandrum. We are further pleased to command that all arrangements be made for the proper conduct of the ceremony according to Māmūl relying on God's help for its successful performance. This neet is issued under date the 11th of Thulam 1080, to Dewan Viśwanātha Patānkar Mādhava Rao as commanded to do."

A few days before the commencement of the ceremony which generally begins on the fifth of Karthigai

of the Murajapam year, writs of invitation are issued from the Palace under the Sign Manual to the two Vadhyans or ecclesiastical heads of the two yogams or groups into which the whole of the Nampūthiri population of Kērala is divided. The Māthūr Bhattathiri and the Ilayadathu Bhattathiri are generally commissioned to invite the Vadhyans on behalf of the Maharaja and these Bhattathiris start from Ampalapula in cabin boats with the usual escort to fetch them from Trichur and Thirunavai. the respective headquarters of the two Vadhyans. Similar writs from the Palace issue also to the Alvancheri Thampurakkal, the six Vaidikans, and the Thekkedathu Bhattathiri. These invitations are time-honoured and indispensable. Letters are also sent to others who apply for permission to participate in the Murajapam ceremony. The convenience of the guests is carefully looked after by the authorities. The important personages are treated with every mark of respect. The Tahsildars from Parūr to Trivandrum are instructed to receive the guests at their respective stations and make every arrangement for their comfortable accommodation.

The Adhyans have no special functions allotted to them and they come and go as honoured guests of the Mahārāja. The Thekkeḍathu Bhaṭṭathiri is a very important functionary inasmuch as he is the person who should start the feeding inside the temple, of course after taking the formal commands of the Mahārāja. This privilege was conferred on him in recognition of the services rendered to Travancore by his ancestors in the war against Ampalapula. The Tharaṇanallūr Nampūthiripād, the chief Thanthri receives special attention. Every Nampūthiri or other Malayāļa Brahman is welcome to the Murajapam.

The sarvani or distribution of money doles to all Brahmans, in the afternoon of the day after the grand Lakshadipam illumination in the temple concludes the Murajapam. The Vādhyāns, Vaidikans, and the Adhyans,

when they take leave of His Highness the Mahārāja, are given suitable presents such as gold bangles, rings, shawls, etc., according to their rank and status. The Thampurākkal alone receives the honour of a visit from His Highness who presents the spiritual magnate with rūja vessels of gold and silver and a purse of 2,000 fanams.

The temple has a government of its own. The Mahārāja is the supreme authority. There is a body which consists of one sanyāsi (Nampūthiri), six Potty Brahmans and one Nayar nobleman (possessing with others a single vote) who constitute the honorary trustees. The lands belonging to this temple bring in a large income which is utilised for the maintenance of the institution, the performance of daily services, occasion: l ceremonies and Uthsavams. Payments are also made towards the expenses of the temple from the State treasury. The final authority in the management of the temple vests in His Highness the Mahārāja who appoints the officers. The officer on the spot is the Mathilakam Kāriyakkār and the Sarvādhikāriyakkār of the Mahārāja's Palace is the controlling officer. Attached to the temple is the Agrasala where twice a day meals are given gratis to Brahmans. During Uthsavam and some other celebrations there is feasting on a sumptuous scale for several days.*

Varkala, also called Janardanam, is famous for its ancient temple dedicated to Janardana or Vishņu. The Varkala Temple. Place has a great antiquity. From an inscription found in the temple, dated A. D. 1252, it is seen that the central shrine was rebuilt in that year. There is in the temple a Dutch bell with an inscription in Latin. It is supposed to have been presented to the temple when the Dutch evacuated Anjengo where they had a factory. Varkala was in former times known also as

^{*} During Uthsavams and certain other important functions there is similar feasting in several other temples also.

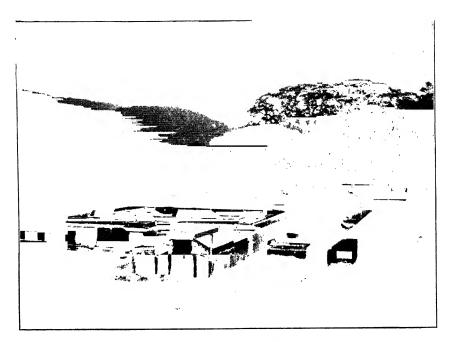
Udaya Mārthāndapuram, so named after a Travancore king. Vīra Udaya Mārthānda Varma. Vaikala is one of the lealth resorts in Travancore and is noted for its mineral springs.

The following tradition is corrent about the name of the place and its ancient temple dedicated to Janardanaswamy:—

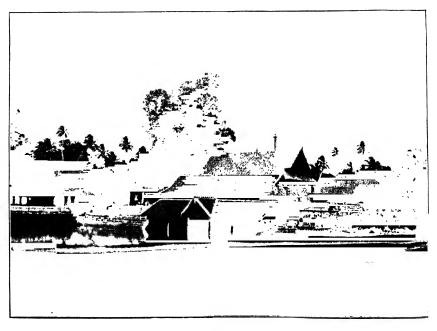
On one occasion, sage Narada went to the abode of Nārāyana and after paying his respects left the place to see Brahma. The Rishi, as was his wont, travelled all along from one lokam (world) to another sounding his Vīņa, the tunes of which so enraptured Vishnu that he quietly followed the Rishi unobserved. When Nārada reached Brahmalōkam, Brahma saw Nārāyana following him and immediately offered salutations to him, on which Vishnu, realising his awkward position, suddenly disappeared. Brahma when he got up saw that the person before whom he had prostrated was his own son Nārada. The Prajāpathis, who were present, laughing at Brahma's expense, the latter cursed them that they should become human beings and suffer the miseries of birth and death. Narada consoled them and advised them to do penance at a place he himself would select for them. He threw his valkalam (bark garment), which fell on a tree. Hence the name Varkala. a corruption of valkala. A temple was built by them near the place and was consecrated to Vishnu.

Varkala attracts large numbers of pilgrims from all parts of India. It is believed that Brahma performed a great yagam (sacrifice) there and the strata of lignite and the mineral waters found in Varkala are attributed to this yagam.

Haripād is noted for its temple of Subrahmonya. Some years back a fire occurred, when all the structures Haripād. within the first prākāra enclosing the central shrine, the namaskāra mandapa and the entire inner enclosures were destroyed. It was therefore rebuilt a few years ago. To the left of the eastern



Sastha Temple, Arienkavu.



Sri Krishna Temple, Ampalapuzha.

entrance to the main temple is a finely built spacious kūthampalam or theatre hall with a raised platform where during the annual festival in the temple the story of the Mahābhāratha is expounded. There are some exquisite wood carvings on the ceiling of this edifice. In front of this temple is found a stone effigy of a human being horizontally poised on its back on an upright block of stone, with its face looking upwards. The temple has a magnificent structure which is the gift of a company of Nāyar Brigade men, once stationed in the locality. Additions to the buildings and the repairs thereto have sometimes been made with the help of voluntary subscriptions amounting to tens of thousands of rupees.* There are a few inscriptions in the temple most of which relate to matters connected with the cultivation of temple lands by private individuals.

The temple at Ampalapula is one of the most important pagodas in Travancore. It originally belonged to the Kāja of Chempakaśśēry. The site Ampalapula. Is said to have been selected by the sage Vilvamangalathu Swāmiyār. The story runs that one day when the Chempakaśśēry Kāja was taking his usual walk with the Swāmiyār he heard the musical note of a flute in a place which was absolutely devoid of any human habitation. Then the Swāmiyār told him that it came from Lord Krishņa and that the place was best suited for a Vishņu temple. Accordingly, a temple was erected there and an auspicious day was fixed for the installation of the idol. But the image made for the purpose was found impure.

The present idol of Pārthasārathi (one of the forms in which Lord Krishņa is worshipped) installed in the temple is supposed to be one of the three which Śrī Krishņa himself handed over to Arjuna for worship, the other two being those at Guruvāyūr and Thrippūnithura. A story is extant in connection with the prathishta of the idol.

^{*} The Travancore Devaswom Manual.

Vilvamangalathu Swāmiyār is supposed to have informed the then reigning chief of Chempakassery, who was unhappy over the unfitness of the first idol and the bad omen which it indicated, that the idol suitable for the newly constructed pagoda was the one which was worshipped in the Karinkulam temple in Kurichi in the territory of the Vatakkumkūr Raja who was a sworn enemy of Chempakaśśēry. A secret plot was devised to get possession of the image. They succeeded in removing the image from within the enemy's territory. They reached a place called Champakkulam the same night and temporarily halted there. The next day, after the performance of the morning pūja, the bimbam was removed to Ampalapula in great pomp and splendour. It is in commemoration of this event that the Mūlakkālcha regatta at Champakkulam is still celebrated. The idol is believed to have been enshrined in the temple by the saint Nāranathu Bhranthan. When a fire occurred in the temple in 1095, the bimbam was temporarily removed from there and kept in safe custody for a day. The re-consecration took place on the following day which happened to be of Thiru Onam asterism. It is on the corresponding day every year that the uthsavam in the temple draws to a close.

The uthsavam is celebrated in the month of Minam. One of the important items in the ceremony is the Nāḍaka-śāla Sadya, which is said to have been instituted by the Rāja of Chempakaśśēry. It is said that Vilvamangalathu Swāmiyār saw the Lord serving food to the temple dependants during the festival since they had been inadequately fed. When the matter was brought to the notice of the Rāja, he ordered a special feast to be conducted for Nāyars alone. Even now it is conducted on a grand scale on the eighth and ninth days of the festival.

Another important ceremony in the temple is the Pallippana—a ceremony which takes place once in twelve years. This lasts for fifteen days. During this time the

story of the Mahabhāratha is recited. Thullals are also performed by the Velans. The origin of this ceremony dates back to the times of Pūrādam Thirunāl—one of the Řājas of Chempakaššery, who surrendered his kingdom to Lord Krishna and ruled it as the agent of the deity. He instituted the Pallippāna ceremony to ensure the welfare of his subjects.

The temple is famous throughout Kēraļa for the pālpāyasam, a milk porridge of exceptional sweetness prepared in very large quantity and offered to the deity. It is afterwards distributed to people who pay for it as well as to those entitled to it by custom.

Attached to this temple there is a small structure called the Guruvāyūr temple. It is so named because the image of Krishņa in the Guruvāyūr temple was kept there for a time in order to prevent it from falling into the hands of Tippu Sultan. A well near the temple is still called the "Guruvāyūr we'l".

The temple of Bhagavathi at Sherthala is a famous place of worship. The image is said to have been consecrated by Vilvamangalathu Swamiyar. Sheithala. There is a local tradition that the Swamivar seeing the Devi on a swing approached her with the result that the goddess ran away. On being pursued at close quarters she jumped into seven tanks in succession in the last of which the temple now stands. The uthsavam in this temple is celebrated every year in Minam and lasts for eight days. Two thalapolis (one on each day) are conducted on two consecutive days immediately preceding the Kodiyettu. They consist in rice or paddy and flowers of the areca palm being placed in pans with a small light in the middle and carried by females (one from each house in the kara) of all ages arrayed in their best robes and costliest jewels. A male devotee with an Ashtamangalyam and light in hand leads the line and a huge concourse of males with

arpu cheering and females with kurava cries accompany them. On reaching the temple, the procession makes several circumambulations. The contents of the Thala are emptied on a mat spread at the eastern entrance of the temple. The females then retire and the men stay on singing songs and making marry.

The sacred flag is hoisted on the day after the second thalapoli. In other temples the arat is the last event of the uthsavam. In Sherthala, however, there is arat on every day except the first. The image is taken in procession to one or other of the seven tanks, mentioned above, each situated a few miles from the temple. From the fifth day (Ayilyam star), kettukalchas are arranged in their proper places. They consist mainly of annams and Bhimans. Most of the figures are symbolic representations of puranic incidents. The heroes are mounted on chakatams or four-wheeled chariots, which are drawn from one place to another. In the night a procession of karakkar starts from near the bazaar and proceeds to the temple, with the beating of drums, the clash of cymbals and the blowing of horns and pipes. Then, after the usual arat and śribēlis every night begins, what is known as, Padayani or torch-light dance with more than a thousand lighted torches. The karakkar begin the dance frantically with the beat of drums, thappus, etc. This is brought to a close by a pyrotechnic display. The Padayani is a mock fight kept up to commemorate the heroic deeds of the goddess against a host of Asurās.

The Vēla is an important day function. The Chēru-vārakār draw their Annams (huge images of the celestial swan, Brahma's vehicle) round the temple and make them bow to the deity. On the sixth day, before the Vēla commences, a grand procession is formed, supposed to be by the Cochinites who enter the temple by the western entrance and after going one round disperse to take part in the Vēla. After Karappuram was ceded to Travancore, the Annams

remained to the Travancore Sirkar, and instead of the Cochinites, the northern karakkar themselves take part in the Vēla which begins at 2 P. M. The Annams are then drawn to the temple, the Pathiyaveettil Panikkar's being the first. On the second is seated the Tahsildar with a cadjan umbrella. The festival (Pūram) on the seventh day being one in commemoration of the consecration, people from distant parts congregate to participate in it. Towards the close of the function the Annams and the Bhimans are removed from the temple precincts. The arat in the evening of the next day is a calm but beautiful sight. The Dēvi's image is escorted on either side by the images of Siva and Vishnu mounted on elephants and taken in procession to the tank with the usual paraphernalia. The Furam was originally an occasion for the singing of coarse songs and drinking. The practice was abolished by command of Her Highness the Mahārāni Regent.

The tradition is that when Sakthi Rishi, a sage of great spiritual powers, was performing penance at Chengan-nūr, Siva appeared to him and asked what boon he wanted. The sage prayed that Siva and his consort Pārvathi should consent to be consecrated there. Some time previously the sage Agasthya had also obtained a boon to that effect. So Siva took this opportunity to satisfy the wishes of both the bhakthas. The god appeared before mortal eyes along with his consort Pārvathi, and Agasthya consecrated the temple. The temple which was rebuilt by the local chieftains known as the Nāinārs came to the hands of the Pōtti jenmies. It has since passed to the Sirkar.

It appears that there was originally a kūthampalam (mandapam where the Chākyār performs his kūthu) of pseuliar structure and a gopuram with five storeys, both of which were destroyed by fire.

There is a very important periodic ceremony performed in the temple, known as Thripiūthu. The cloth wrapped round the metal image of the goddess is found to be discoloured with red spots. The discoloured cloth is sent up to the ladies of the Vanjipula or Thālaman Pōtti's family for examination and on being passed by them, the image is removed to a separate shed, the inner and principal shrine being closed for the period. The cloth is given to the washer-woman and never used again for the goddess.

There is a great demand among the people for the discoloured cloth which is passed as a holy relic. It is only after the purification ceremony is performed on the fourth day that the image is taken back to the shrine. Incredible as the account may appear, it is implicitly believed by the people. It is said that Col. Munro who went to Chengannūr to fix the pathivu was at first sceptical about the truth of the phenomenon. But on personal examination of the cloth he was satisfied that the expenses for the ceremony were justifiable. Much importance is attached to the fact that the expenditure under the item bears the seal and signature of Col. Munro. The uthsavam ceremony of this temple lasts for twenty-eight days and sometimes longer if the above ceremony occurs in the interval.*

[•] In the Indian Antiquary for May 1889 Mr. Sankunni Vāriyar gives the following account regarding the Chengannūr temple: "The following is an interesting, if unpleasant, variant of the legend of the 'bloody cloth' attached to so many Saints in Europe. At Chengannūr there is a temple to Siva of considerable celebrity. In it there is an image of Pārvathi, his consort, Pārvathi being female, of course menstruates! and periodically a red spot appears on the cloth worn by the image. Whenever this happens the temple is closed for three days and no worship allowed in it. In the works of Revi Varman Tampi, a celebrated Travancore poet of the begining of this century, is to be found an allusion to this in some of his very elegant verses."

Vaikom, Kaduthuruthi and Ettumānur are three important temples in North Travancore dedicated to Śiva.

Vaikom. The following is the tradition regarding the temple:—

When Khara was devoutly engaged in penance in the temple of Chidambaram, God Nataraja appeared to him and gave him three lingams (idols) enjoining him to consecrate them at such places as he thought fit. Carrying the three idols, one in the right hand, another supported between the neck and chin and the third in his left When he reached the hand, he travelled southwards. place now called Vaikom, he felt the lingam in his right hand unbearably heavy and consequently dropped it there. He tried to lift it but in vain. Suddenly an aerial voice (Aśafīfivākku) was heard to the effect that he need not pick up the one he had already dropped. He might, it was directed, consecrate the others at places a yojana apart from one another going southward. The place where the first lingam was dropped is Vaikom, the second Kaluthidukki (corrupted into Kaduthuruthi) and the third Ettumanur. Contemporaneously with Khara, there was performing penance at Chidambaram another devotee, Sage Vyaghrapāda. On his entreaty to the deity to point out a lingam for his daily puja till the end of his earthly career, he was also directed southwards, and on his coming to Vaikom, Khara requested him to take charge of the lingam he had dropped, which Vyāghrapāda accordingly did. Hence the place came to be known as Vyāghrapādapuram corrupted into Vaikom.

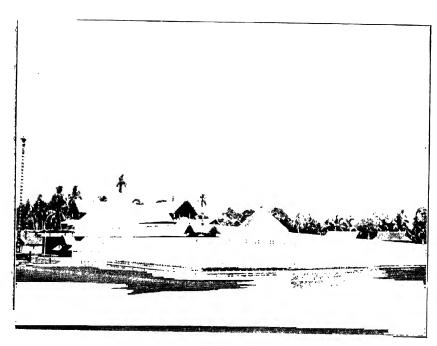
When Parasurama came to the spot, he found the idol under shallow water and, selecting an elevated ground a few yards off, built a temple there. This is the present temple of Vaikom, of course with subsequent structural additions both by the former owners and subsequently by the Sirkar. Parasurama is said to have stayed here for a year performing Sahasrakalasam ceremony and feeding a number of Brahmans daily. Even to-day the feast to the Brahmans is

continued without interruption, the devotees defraying the expenses in satisfaction of vows previously made. Formerly the management of the temple affairs was vested in a committee of Nampūthiři Brahmans who exercised considerable powers. Even now, on the evening previous to the commencement of the Ashṭami festival, the temple elephant is taken to each of the street doors of the various Brahman houses of the place. This means an invitation to attend the ceremony of Koḍiyēttu. The Nampūthiřis assemble in the temple and give their formal consent to the hoisting of the flag. Thus the festival begins. The temple affairs are now managed by the Sirkar, the Uṛāṇmakkār having lost all their power, though they still receive all their perquisites regularly for their usual functions.

The chief festivals in the temple are the Ashṭamis in the months of Vrischigam and Kumbham celebrated in commemoration of the appearance of Lord Śiva before the sage Vyāghrapāda. The Sahasrakalaśam is another important ceremony. Thousands of pilgrims from all parts of South India attend the Vrischigam festival.

The Ettumānūr temple is also very sacred and is visited by numerous pilgrims. It possesses a great wealth of jewellery besides 'seven and a half' golden elephants. The deity, it is believed, is fond of silver and gold as distinguished from the one at Vaikom whose delight is the feeding of Brahmans. Worship in this temple is believed to be efficacious in removing the influence of evil. spirits. The structure is an ancient one and presents some of the earliest specimens of South Indian painting and fine wood work. The representation of the Naṭafāja dance is of remarkable artistic elegance.

Kaduthuruthi is situated between Ettumanur and Vaikom. But the temple here is not now so popular as it was in the time of the Vaṭakkumkur Ƙajas who had their capital at that place.



Siva Temple, Ettumanoor.



Entrance to Thiruvettar Temple.

Śabańimala is famous for its temple dedicated to god Śāstha.* It is situated on a high hill surrounded by dense forest infested by elephants, tigers and other wild beasts. Notwithstanding the dangers of a journey through those dangerous tracts thousands and thousands of pilgrims flock there every year for the Makańa Vilakku. The pilgrims carry with them their own provisions in head-loads taken by themselves eschewing all considerations of rank and dignity. Of late the number of pilgrims shows a phenomenal increase. Men, women and children undertake the journey with ecstacy.

The Kōikkal temple at Āttingal is important as being dedicated to Bhagavathi, the household goddess of the Rāṇis of Travancore who are still called the Āttingal Rāṇis. Every year His Highness the Mahārāja pays a visit to this temple and celebrates the ceremony known as Ariyiṭṭuvālcha.

The Bhagavathi Temple at Kaḍakkal is celebrated for the annual festival known as the Kaḍakkal Thiruvāthirai, on which day people from distant parts visit the temple.

In addition to the temples enumerated above, there are some temples specially resorted to by those suffering from chronic diseases that have defied medical treatment. The chief among these are:—

- 1. The Uralikunnam temple of Siva in Kottayam.
- 2. The Thakali temple of Śāśtha in Ampalapula.
- 3. The Thiruvilai temple in Sherthala.

In addition to the worship of the usual images of deities in the temples and in the households is the Sala-

grāmapūja. It is sacred to Vishņu. It is performed in some houses. The Sāļagrāmam or fossil cephalopodes is found in the bed of the river Gundaki in Nepal. The three shapes of Sāļagrāmams which are highly priced are the

^{*} The other important Sastha temples are Sasthankotta, Ministry, Achankoil. Alienkavu.

Vishņu Sāļagrāmam, the Lekshmi-Narasimha Sāļagrāmam and the Mathsyamurthy Salagramam. The first has a chakram on it and bears marks known as the Shank, Gada and Padma from the weapons of Vishnu. The second has two chakrams on the left of the Vadana and has dots or specks all over it; the third, the Mathsyamurthi, is a longshaped flat stone with a Vadana which gives it a resemblance to the face of a fish: it bears two chakrams one inside and the other outside the Vadana, and also has specks and dots on it in the shape of a shoe. There are four or five varieties of this species. There is one Salagramam which has no Vadana and is known as the Ugrachakra Salagramam. It is round in shape with two chakrams. is described as furious Sāļagrāmam; for, if not worshipped with sufficient ardour, the neglect spells the ruin of the owner. There are also other kinds of Salagramams. Possession of Salagramams without due worship is believed to bring evil. None but Brahmans keep Salagramams in their possession. For an orthodox Brahman household the ownership of three or four stones is an absolute necessity. These must be duly worshipped and washed in water, and the water taken as thirttha. Boiled rice and other food must be offered daily. (Vide foot-notes, Travancore State Manual (1906), Vol. II, pp. 58 and 59).

Certain plants and animals are sacred to the Hindus. Among the former are the Aswattha, the Bilwa and the Thulasi in the vegetable kingdom. The Veneration of Aswattha is planted in the outer precincts of temples as well as in common village grounds and private gardens. Pradakshinams or circum-ambulations round the Aswattha tree are believed bring religious merit. A symbolic or mystic meaning also attached itself to the Bodhi tree; for, planted at the centre of the Cosmic cross, it was the tree of Vishnu—the sun at noon and the all-pervading Cosmic force. It stood for the

mystic tree of which the sun, the moon and the stars were fruits and the blue vault of heaven the foliage. The Bilwa is sacred to Śiva in whose worship it is largely used. The Thulasi is likewise sacred to Vishņu. As the leaves of the Bilwa strung together into garlands adorn the images of Śiva, garlands of Thulasi are strung to grace the image of Vishņu and the Avatārs. The Thulasi, however, is used in all temples irrespective of the deity installed therein. The Kuša, Dūrva and Darbha are also used in many religious ceremonies.

The cow, the bull, the garuda, the peacock, the monkey and the serpent are the chief species of animals which are held in veneration. Hanumān, the monkey god, is worshipped by the devotees of Rāma. Hence the veneration paid to the whole class. The adoration of serpents, however, is general among the Hindus throughout the Malabar country. The following account of a serpent kāvu is taken from Mr. Nagam Aiya's State Manual with slight modifications.

To the Hindu the serpent has been the object of worship and propitiation from very early times. No ortho
Serpent Kāvūs dox person would dare to kill or even hurt a snake, especially of the hooded variety, for it is a very common belief that those who kill one will be punished in this life and in the next. Even to this day it is a custom in Southern India for the childless women to propitiate the serpent deity by performing the ceremony called Nāgaprathishta or consecration of a stone idol representing the serpent-god, generally under the Aswattha tree, in the hope of getting issue.

A serpent kāvu or an abode of snakes was an indispensable adjunct to well-to-do Nāyar and Nampūthiri houses, but the practice is falling into desuctude. Lieuts. Ward and Conner estimated the number of kāvus at 15,060 nearly 120 years ago. Some are of great age and repute

and are richly endowed. A mythological origin is ascribed to serpent worship in the Kēraļōlpaťhi.

Parasurama is said to have ordained that the places allotted to the Nagas were to be left untouched by the knife or the spade, thus enabling the underwood and creepers to grow luxuriantly therein. It is to such places that the name of kavu (or grove) is given. In it are several granitestone idols of serpents installed on a stone basement called Chithrakūḍam, and sometimes a low wall is thrown round to prevent cattle or children from straying into it. The propitiation of serpents is deemed essential for the well-being and prosperity of the householder and his family.

Mannārśāla Kāvu is the most important of the serpent kavus. "According to a local tradition a member of this Illam married a girl of the Vettikottu Illam, where the serpents were held in great veneration. The girl's parents being poor could give her nothing in the way of dowry. They therefore gave her one of the stone idols of the serpent, of which there were many in their house. The girl was enjoined to take care of this stone and to worship it regularly. In a short time, it is said, the girl became pregnant and gave birth to a male child and a snake. The snake child was located in an underground cellar of the house and brought up. The Illam prospered from that day. The women and the snake are believed to be the cause of the affluence of the family, and to this day to the surname of the male members of that house are added, by way of distinction, the names of the serpent-gods and that of the female. After a time when the serpent child grew and gave rise to a numerous progeny, they were all removed to a spot on the south of the house where a magnificent grove has since grown. In this spot are stone idols put up for the king and queen of snakes, known as Nagaraja and Naga-Yakshi, and for various members of the family. In the cellar of the house, as well as in the grove where the stone images are placed, a solution of

Nurum palum (rice flour and milk) is offered once a year, that is, on the day following the Sivaratri festival in the month of Kumbham. The same kind of offering is made to the Chithrakudam also. About twelve and one-fourth Edangalis of dough and milk are mixed together and kept in the cellar. Thereafter the door of the cellar is shut for three days, and lest any body should pry into what passes within the cellar, the women of the household cover the crevices and holes of the door by the big cadjan umbrella of the female inmates of the Illam. On the third day the door is opened, and whatever remains in the vessel of the dough and milk placed there is thrown into a tank as unfit for human use. The mixing up of Nurum palum and the performing of the pujas are done by the eldest female member of the Illam. The Nurum palum is made of rice flour, saffron powder, cow's milk, water of the tender coconut. fruit of the Kadali plantain and ghee. In the Nalukettu of the house, offerings of Nurum palum and cooked rice, as well as Kuruthi (a red liquid composed of flour, saffron and chunam), take place every Ayilliam (star) day. Every morning the king and queen of serpents are washed and an offering of fruit and milk is made to them; in the noon offerings of Vella-nivedyam (cooked rice) and afterwards of fried grain (malar) follow. During the month of Vrischigam (November) a special puja called Navakam and an offering of Nurum palum are daily observed. On the Sivaratri day, in the month of Kumbham, the customary five pujas and Navakam are performed, and in the evening of the same day sacrificial offerings to the serpents and Kuruthi (offering), as stated above, are made, and at the conclusion of the day's puja, the idols are taken in procession round the temple. On the day of Ayilliam (star) in the months of Kanni, and Thulam (September and October), all the serpent idols in the grove and the temples therein are taken in procession to the Illam, where offerings of Nurum palum, Kuruthi and cooked rice are made. The person who

carries the idol of the Nagaraja is the eldest female member of the family, and the procession is conducted with great pomp and rejoicings. The eldest female member of the house, though married, is expected to lead a life of abstinence when she becomes the oldest female in the family. During the festive days at Mannarsala thousands of people assemble to worship and propitiate the serpent gods. The offerings include gold and silver coins, and gold, silver, copper or stone effigies of snakes, grains of all kinds, pepper, salt, saffron, tender coconuts, bunches of Kadali plantains, melons, oil, ghee, sandal-wood, silk and other things. On Ayilliam days, the Pulluvans sing and dance either on their own account or for pay from the other pilgrims. the day previous to the Ayilliam ceremony a large number of Brahmans are fed. A small sum of money is also given by the Sirkar every year. If more funds are required, the Nambiyathi is expected to meet them from his own private income. The grove and its temples cover an immense oblong space measuring about sixteen acres in extent. The inmates of the Illam are the priests of the gods in the grove. It is believed that whenever the puja is not performed with the strictest personal purity or care to small details, the serpent gods get offended, which feeling is exhibited by the largest cobras coming out of the grove as a warning. It should be remembered that, as a rule, the serpents are not seen out of their holes though hundreds of them are known to exist in the inner recesses. When any is seen, especially if a real cobra, the village astrologer is consulted, who readily finds out the cause of the wrath of the serpent gods and steps are taken immediately to pacify them by appropriate propitiatory ceremonies. The people believe in the efficacy of these ceremonies."

One of the most interesting, though not remarkable, cases of similarity between savages and civilised religions is

found in the worship of snakes and trees.* In the Naga or dragon form the latter cult may have been aided by the dragon-worshipping barbarians in the period of the northern But in essentials not only is the snake and dragon worship of the wild tribes one with that of Hinduism. but, as has been seen, the latter has a root in the cult of Brahmanism also, and this in that of the Rig Vēda itself. The poisonous snake is feared, but his beautiful wave-like motion and the water-habitat of many of the species cause him to be associated as a divinity with Varuna, the water god. Thus in early Hinduism one finds snake-sacrifices of two sorts. One is to cause the extirpation of snakes and the other one to propitiate them. Apart from the real snake, there is revered also the Naga, a beautiful chimerical creature, human, divine, and snake-like all in one. These are worshipped by sectaries and by many wild tribes alike. The Nāga tribe of Chota Nagpur, for instance, not only had three snakes as its battle-ensign, but built a serpent-temple.†

"Tree and plant worship is quite an antique as is snake-worship. For not only is soma a divine plant, and

^{*} The standard work on this subjectis Ferguson's Tree and Serpent Worship, which abounds in interesting facts and dangerously captivating fancies."

[†] JRAS., 1846, p. 407. The ensign here may be totemistic. In Hinduism the epic shows that the standards of battle were often surmounted with signa and effigies of various animals, as was the case, for example, in ancient Germany. We have collected the material on this point in a paper in Jaos, xiii. 244. It appears that on top of the flag-staff images were placed. One of these is the Ape-standard; another, the Bull-standard; another, the Boar-standard. Arjuna's sign was the Ape (with a lion's tail); other heroes had peacocks, elephants, and fabulous monsters like the carabha. The Ape is of course the god Hanuman; the Boar, Vishpu; the Bull, Siva, so that they have a religious bearing for the most part, and are not totemistic. Some are purely fanciful, a bow, a swan with bells, a lily; or, again, they are significant of the heroe's origin (Drona's 'pot'). Trees and flowers are used as standards just like beasts. Especially is the palm a favourite emblem. These signa are in addition to the battle-flags, (one of which is blue, carried with an ensign of five stars). On the plants compare Williams, Brahmanism and Hinduism, p. 338.

not only does Yama sit in heaven under his 'fair tree' but 'trees and plants' are the direct object of invocation in the Rig Veda and the Brahmanic law enjoins upon the faithful to fling an offering, bali, to the great gods, to the waters, and 'to the trees' as is the case in the house-ritual. We shall seek, therefore, for the origin of tree-worship not in the character of the tree, but in that of the primitive mind which deifies mountains, waters, and trees, irrespective of their nature. It is true, however, that the greater veneration due to some trees and plants has a special reason. Thus soma intoxicates; and the thulasi, 'holy basil,' has medicinal properties, which makes it sacred not only in the Krishna cult, but in Sicily." This plant is a goddess, and is wed annually to the Salagrama stone with a great feast. So the sami plant is herself divine, the goddess Sami. Again, the mysterious rustle of the bo tree, pipal, may be the reason for its especial veneration; as its seeming immortality is certainly the cause of the reverence given to the banyan. It is not necessary, however, that any mystery should hang about a The palm is tall, (Siva's) aśōka is beautiful, and no trees are more revered. But trees are holy per se. Every 'village-tree' is sacred to the Hindu. And this is just what is found among the wild tribes, who revere their huttrees and village-trees as divine, without demanding a special show of divinity. The birth-tree (as in Grecian mythology) is also known, both to Hindu sect and to wild tribe. But here also there is no basis of Aryan ideas, but of common human experience. The ancestor-tree (totem) has been noticed above in the case of the Gonds, who claim descent from trees. The Bhars revere the (Sivaite!) bilva or bel; this is a medicinal tree. The marriage-tree is universal in the south (the tree is the male or female ancestor), and even the Brahmanic wedding, among its secondary after-rites, is not without the trees, which are adorned as part of the ceremony.

The principles and practices of what is generally known as Hinduism have been described in this chapter.

But some of the least developed tribes are also treated under the name Hindus.

The essentials of their religious faith therefore merit a brief description. The following is from the Travancore Census Report, 1931.

"The religion of the Primitive Tribes has been described differently by various authorities. By some it has been called Fetishism, which Sir Herbert Risely defines as "the worship of tangible inanimate objects believed to possess in themselves some kind of mysterious power."* Some have called it Naturalism, which means the worship of natural phenomena. Others have called it Spiritism, according to which the natural phenomena are interpreted as the evidence of an underlying soul or spirit which is regarded as the controlling factor of the world order. Most Primitive Tribes medicine-man whose function it is to invoke these spirits "to intervene for good or evil in the affairs of the visible world."† The most common name by which the religion of the primitive man is known is Animism, which is considered by Sir Herbert Risely to be the best term available. The basic principle of Animism is the recognition and worship of some power or spirit which is supposed "to reside in the primeval forest, in the crumbling hills, in the rushing river, in the spreading tree, which gives its spring to the tiger, its venom to the snake, which generates jungle fever, and walks abroad in the terrible guise of cholera, small-pox or murrain." Animism is more or less the same as Polytheism in its primitive form. From primitive Polytheism has arisen the refined Polytheism of Hinduism which regards the spirits or deities

^{*} Sir Herbert Risely, The people of India, p. 220.

[†] Ibid. p. 221.

¹ Ibid. p. 224.

associated with inanimate objects and natural phenomena as nothing more than the impersonations of the attributes of the one God. Out of such a conception of religion has the philosophic mind of the Hindu evolved his dualistic and monotheistic view of the world, which is the essence of real Hinduism. "From this point of view," says Sir Herbert Risely, "Hinduism may be described as Animism more or less transformed by philosophy, or, to condense the epigram still further, as magic tempered by metaphy-The highly philosophical form of Hinduism, with its monotheistic idea world, of the refined product distilled out of the crude belief of the Primitive Tribes. But, such a conception of the manifestation of divine power is beyond the comprehension of the uncultured masses, and to them Hinduism appeals in the form of Polytheism which is only a modified form of Spiritism or Animism. From what has been said above it will be clear that the change from the primitive religion to the highest form of Hinduism is a gradual process of evolution, and that it is hardly possible to draw a clear-cut line of demarcation between the faith of the Primitive Tribes and that of the lowest section of the Hindus who are incapable of realising the philosophical aspect of Hinduism. Among Hindus there are classes of people like the Pulayas and the Parayas whose religion is more akin to Animism than to Hinduism, while among the primitive people there are tribes whose Animism has been tempered by the influence of Hinduism. The influence of Hinduism is clearly perceptible in the religion of several Primitive Tribes in Travancore such as the Muthuvan, the Malayarayan, the Mannan and the Kanikkaran. The Muthuvans worship the Hindu God, Subrahmonya, Malayarayans, the Mannans and the Kanikkars worship Sastha, a god of the Hindu pantheon. Sabarimala is a famous. Sastha temple to which devotees even of highly

^{*} Sir Herbert Risely, The People of India, p. 233.

educated Hindus make annual pilgrimages. The Malayarayans and the Mannans, like the Hindus, visit this temple once a year and make offerings to the deity. These instances show how the religion of the Primitive Tribes who come in contact with the people of the plains becomes modified by the influence of Hinduism. This process of Hinduization of the Primitive Tribes accounts for the gradual falling-off of the numbers returned under Tribal Religions from census to census, as we shall see presently."

The observance of vrathams or fasts is an important item in the religious life of a Hindu. The ancient sages recognised the proper place of body and mind Fasts and Feasts. in the spiritual progress of man. And fasts appear to have been designed as a course of discipline. The value of fasts as a cleansing and curative agent for the human constitution has been so widely recognised that it requires no elaborate argument for its defence. Vedas say that there is no thapas greater than abstention. The Githa explains it thus: "The attractions of the objects of the senses recede from him who abstains from food (i. e., feeding the senses)." Calmness of mind is a sine qua non for any spiritual activity worth the name. These, however, are only the negative or preliminary aspect of a Hindu fast. The active element consists in a continuous application of the mind to the eternal verities. Frequent concentration on the various aspects of reality turns the mind more and more godward and accelerates the pace towards self-realisation. The fast is thus symbolical of a great spiritual truth. During that fast attention is particularly concentrated on that truth. The details of the observances are also so designed as to lead to that result. This will be evident if we grasp the real significance of the various details.

The Sastras, etc., are full of injunctions directing the observance of fasts for the promotion of spiritual aims and

the practice of ethical virtues. Vrathas are of various degrees of austerity. Complete abstention from food and other comforts is insisted on in some cases, while only partial abstention is required in others. In the latter class there are those vrathas in which only one meal is allowed and those others in which no regular meal is allowed but only light refreshments such as milk and fruits. In all cases the use of meat, fish and intoxicants are prohibited. So also are all other bodily indulgences. Some vrathas require keeping awake throughout the night, which is not necessary in others.

Each vratha is observed in honour of a particular deity or manifestation of the supreme One. The gods in the Hindu pantheon, it is hardly necessary to say, represent the various manifestations of the infinite powers of the Eternal One. It is neither necessary nor possible for anyone to worship all these deities individually. Each individual has to select his or her favourite deity according to capacity and inclination. According to the Sastras certain days are sacred to certain deities and worship offered on those days is considered more efficacious.

The following are some of the important fasts observed by Hindus in Travancore:

Shashti: The sixth day of the fortnight is considered to be sacred to Subrahmonya. A fast is usually observed on that day by those who wish for issues. Fasting is observed during day-time and only milk and fruits offered to the Lord are taken after worship in the night. People who could not fast take a raw rice meal in the day-time and take light refreshments in the night. Pūja is offered to Subrahmonya on that day and Skānda Purāna recited. The Skānda Shashti which comes off on the sixth day of the bright fortnight in the month of Thulām is considered very important. That is reputed to be the day on which Lord Subrahmonya killed Śūrapadmāsura.

 $\bar{E}k\bar{a}da\dot{s}i$: This is sacred to Vishnu. It is observed by almost all sections of the Hindus. A strict observance demands complete starvation and vigil throughout the night. But ordinarily people content themselves with a spare meal from which rice is eschewed. Those who observe the fast are expected to devote themselves to worship and meditation. On the next morning, i. e., Dwadasi, the devotee worships Vishnu before he breaks the fast. The reward for observing this vratha is believed to be Moksha or salvation from birth and death. The most imnortant Ekadasis are those in the bright fortnight of Vrischigam, called Guruvāyūr Ekādaśi-because it is considered particularly sacred to the deity at Guruvavūr-and Vaikunta Ekadaśi or Swargavathil Ekadaśi in the bright fortnight of Dhanu. The latter is celebrated in the Śrī Padmanabhaswamy's temple in Trivandrum and other important Vishnu temples in Travancore.

Pradēsham: The thirteenth day of the fortnight is considered sacred to Siva. In the early hours of the night on that day the Lord is said to celebrate his famous Natafāja Nṛiha or transcendental dance. The vratha consists in fasting throughout the day and in devotional exercises. Some people also keep awake at night; but this is not general. If the Pradēsham falls on a Saturday in the dark fortnight, it is considered very holy.

Full Moon: A fast in honor of the goddess Pārvathi is observed on full moon days. This is considered very efficacious in giving the devotee wealth and issue and other objects of desire. The goddess is worshipped and nivēdyam offered to Her. That nivēdyam is the only food taken in the night. Of all the full moons Chithrā Pūrņima, i. e., the full moon coming off in the month of Mēdam, is considered the most auspicious.

New Moon: This is sacred to the Pithrus or the manes of departed ancestors to whom sradhas are offered. The persons who perform sradha fast on the previous day—the

previous night in all cases. On the śrādha day no food is permitted to be taken till after its performance. The new moon days in the months of Makaram and Karkadagam are of greater importance than in the other months. People flock to important centres of pilgrimage and thirtthas on those days for ablutions and worship.

The week days: Each day of the week is sacred to one of the planets. Those who desire to propitiate particular planets must therefore choose particular days for the observance of the prescribed rites. Thus those who want to propitiate the Sun have to observe a fast on Sunday, those desiring to propitiate the Moon, Monday and so on. Certain days in the week are sacred to particular deities. Thus Monday is sacred to Siva. The Sōmavāra vratha is believed to bring on conjugal happiness. Similarly, Tuesday and Friday are important to Bhagavathi and Subrahmonya. Wednesday and Saturday to Śāstha and Thursday and Saturday to Vishnu.

Ashţami-Kōhini. (Śrī Krishṇa Jayanthi) in the month of Chingam is celebrated as the birth-day of Śrī Krishṇa. A fast is observed on that day, the exploits of Śrī Krishṇa are sung and the Lord worshipped at midnight which is said to be the time he was born.

Vināyaka-chathurtthi: As the name implies, the day is sacred to Vināyaka or Gaṇapathi. It falls on the fourth day of the bright fortnight in the month of Chingam. A fast and worship of Gaṇapathi are observed. People are prohibited to see the moon on that day as it is apprehended that it would bring evil reputation, misery, disease or other misfortune.

Navarāthri: This is a nine days' festival beginning from the first day of the bright fortnight in the month of Kanni. This is considered to be a very favourable period for the worship of Sakthi whether in the form of Saraswathi, Kali or Lakshmi. Many people observe a fast full or partial all the nine days. The last two days are specially set

apart for the worship of Saraswathi. From the evening of the eighth day which is called Durgāshṭami and throughout the next called Mahānavami the worshippers are prohibited to do their accustomed work until the Pūja Eduppu on the morning of the tenth day with which the festival closes. The Navarāthri is known as Dusserah in certain places and as "Durga Pūja" in others.

Thṛkkārt'hika: The Kārt'hika asterism in the month of Vrischigam is sacred to both Subrahmonya and Bhagavathi. Illumination at night is the most important thing in the celebration of the festival.

Thiruvāthira or Ārdra: This day in the bright fortnight of the month of Dhanu is very sacred to Śiva. It is celebrated in commemoration of the manifestation of Śiva before Pārvathi who was doing penance. This is a national festival for the Hindu women of Kēraļa. A vratham is observed even to this day especially in the northern parts of the State. They take only light food that day and keep awake during the night. The entertainment they resort to keep themselves awake during the night is known as Thiruvāthira kali, a graceful form of dance accompanied with singing. Before dawn the next day they bathe and get a darsan of Śiva. This is called Ārdrā Darsanam.

Sivarāthri: This falls on the fourteenth day of the black fortnight in the month of Kumbham. It is sacred to Siva. This day is celebrated throughout the land by fast and vigil. The reading of Siva Purānam, the worship of Sivalingam, the repetition of the Lord's names, etc., form the chief observances of the vratha.

The above are the most important vrathams observed by the Malayalis, but there are a good many more observed by the non-Malayala Brahmans and others. The Upakarma and Gayathri Japam in the month of Śravana are observed by all the above classes of Brahmans. The important element in this festival is the offering of Tharpanams to Rishis and Pithrūs. It may be noted that this is not

observed by the Malayāla Brahmans as they have to offer Tharpanams to Rishis and Pithrūs daily.

The next day comes off Gayathri Japam when each Brohman is directed to repeat the Gayathri one thousand and eight times. According to the rules of strict orthodoxy the Gayathri has to be said every day but as it is found difficult in practice, a particular day in the year is fixed for this.

Dīpāvaļi is an important festival day falling on the fourteenth day of the dark fortnight in the month of Thulām. This is also known as Naraka Chathurdasi as Śrī Krishņa is said to have killed Narakāsura that day. Oil bath in the early morning, tharpaṇam, feasting and merrymaking are the important elements in this festival. The festive element has to a large extent been copied by the Malayāļis south of Quilon.

Gouri Vratham. The day preceding Vināyaka Chathurtthi is set apart for the worship of Pārvathi. An image of Pārvathi is made with turmeric powder, decorated with taste and worshipped by sumangalis (i. e., women with husbands living). Long life and happiness of their husbands are believed to be ensured by this ceremony.

Varalakshmi Vratham: This comes off in the month of Chingam and is also intended for the longevity of the husbands of the women devotees. The picture of Lakshmi is drawn with chunam on a copper pot. The pot is filled with water and a coconut placed to cover its mouth along with leaves of the mango tree. The copper pot is then worshipped as Lakshmi.

The Pongal: This falls on the first day of Makaram. Tharpanam is followed by sumptuous breakfast. This is the harvest feast of South India.

Māṭṭuppongal: The day following Thye Pongal is set apart for treating the cows and bulls which have been of service to the people in the previous agricultural seasons. They are bathed, decorated and fed. The animals are not made to work that day.

Anantha Vratham: This is peculiar to the Madhwas, the followers of Madhwacharya. This is a fast in honor of Śrī Anantha Padmanabhaswamy and comes off in the month of Kanni. The object of the vratha is to secure the prosperity of the devotee.

Srī Kāma Navami: This is a nine days' festival in the month of Mēdam. The Navami or the ninth day is the anniversary of the birth of Śrī Kāma who is worshipped during all these nine days.

Yūgādi Panļika: is the Telugu New Year's day. It comes off in the month of Mīnam. An important thing on the Telugu and the Tamil New Year's day is the reading of the Almanac in the family circle by the priest. There is much festivity and gaiety among the Telugu people that day.

Chithira Vishu: is the Tamil New Year's day. The family deity is decorated the previous night and is the first thing to be looked at on the Vishu day. The Vishu is observed by the Malayālis as a gala day.

Hinduism, while keeping to the old moorings, has adapted itself to the changing ideas and improved standards of thought and general education. The Modern currents. faith has survived the assaults and the shocks of numerous invasions, invasions not of armies and navies alone but also of alien methods of thought and forms of faith. Like Agni Hinduism has fed upon what came in contact with it, old concepts drawing new associations from time to time and place to place, but always preserving the fundamental essence. Ignorance of its true principles induced careless observers to rail at its teachings and condemn its formalism and adherence to rigid custom. But a hundred and fifty years of proselytising effort has shown that the religion of his ancestors is as dear to the educated Hindu as it is to his unlettered brother. Chaithanya, Kabir, Kamananda Valla-

bhāchārya, Thukārām, Nānak, were all of them the products of Indian spirituality. The Brahmo Samaj and the Arya Samaj have contributed their share to the removal of unnecessary barriers of caste and uncompromising orthodoxy. Rām Mōhan Roy who made a careful study of Hinduism, Christianity and Islam, established the Brahmo Samāj as the foundation for a Universal Theistic Church. The Tagores, more especially Maharshi Devendranath Tagore, gave it their unstinted support as a setoff to idolatry. So did the famous Keshub Chander Sen. But the complete abandonment of caste and orthodox faith was soon discovered to be impossible and the hopes entertained by the earnest band of workers were soon seen to be difficult, nay impossible of realisation. teachings of Dayananda Saraswathy secured a large following not only in the Punjab but in the United Provinces, Bombay and other provinces. The faith recognises the ultimate authority of the Vēdas. Polytheism and the use of images are regarded as vile degeneration from the original pure religion of the Vēdas. belief in transmigration and the law of Karma are upheld. According to Dayananda the means of salvation are the following: "Obedience to God's commandments; freedom from irreligion (vice); freedom from ignorance, from bad company, from evil thoughts or associations and from improper sensuousness or indulgence in wicked pleasures, veracity, beneficence, knowledge of impartial justice, devotion to the cause of virtue or religion, remembering God, praying to Him, meditating on Him, or introspection acquiring knowledge, teaching any honest profession, the advancement of knowledge, the adoption of righteous means in affairs, doing every thing with impartiality, equity and righteousness".* These doctrines are fascinating in their simplicity and moral force, but the fact remains that notwithstanding the advocacy of enthusiastic reformers very few people in Travancore have entered the

^{*} India and its Faiths by James Z, Prat, p. 204.

Arya Samāj. Its condemnation of idolatry does not commend itself to the bulk of Hindus. In Travancore the movements for the mitigation of the severities of caste, if not its total abolition, have been popular. The teachings of Śrī Nārāyaṇa Guru Swāmy gave a momentum to the forces which were generated by the extension of education among the masses and the tolerant policy pursued by the State in recognising the legitimate claims of backward communities.

The Guru was a man of deep piety and great learning, well up in Yōga practices. But being of the view that temples were necessary for the average individual, he consecrated many shrines in Travancore which were open not only to members of his community but to those who belonged to other castes. He established a Sanskrit College and a mutt at Alwaye. In 1911 the temple of Śarada at Śivagiri, was consecrated. The Swamy's activities stopped the tide of Christian conversions in the community and several who had become Christians were reconverted to Hinduism. Later on the Swamy was obliged to take a more decided and novel attitude in social matters. Some persons in the community, dissatisfied with the normal slow process of social evolution, became Buddhists believing they could achieve social equality at once. The Swamy soon after proclaimed the new religion "One Caste, One God" and he advocated intermarriage between the various castes. His influence was not confined to the members of his community. Among his sanyāsi disciples were many Nayars. He entered Maha Samadhi in 1928

Of modern religious movements in Travancore the Kamakrishna Mission merits mention at some length.

Kamakrishna The influence of the teachings of Śrī
Mission. Kamakrishna Paramahamsa has spread
throughout the whole of India and has extended to

countries beyond. In him the highest devotion to the Mother found the most forcible and alluring expression. He was neither a scholar nor a thinker. Nor was he a philosopher. Of him says Mahathma Gandhi thus: "The story of Ramakrishna Paramahamsa's life is a story of religion in practice. His life enables us to see God face to face. No one can read his life without being convinced that God alone is real and all else is an illusion. Ramakrishna was a living embodiment of godliness. His sayings are not those of a learned man, but they are pages from the book They are revelations from his own experience. They therefore leave on the reader an impression which he cannot forget, an influence which he cannot resist. In this age of scepticism Ramakrishna presents an example of a bright and living faith which gives solace to thousands of men and women who would otherwise have remained without spiritual light." Vivēkananda his disciple carried the light of renovated Hinduism from the Himalayas to Cape Comorin and shed its lusture in America and Europe. He explained the basic principles of the faith with an earnestness and energy which only deep learning and profound piety could evoke. Vivekananda visited Travancore once and it is authoritatively stated that at Cape Comorin, sitting on the last stone of India, he saw a beautiful vision of the glory of Sanathanadharma. He organised the Kāmakrishņa Mission on the 1st of May 1897 and ordained a number of Sanyasis. The object of this mission is to train monastic workers, to live up to the ideals and to propagate the vedantic religion in the light of Kamakrishna's life and teachings, establish fellowship among the followers of different religions, and serve suffering humanity without making any distinction of caste, creed or community.

"Of all modern religious movements, the Kamakrishna movement appears to have been the most successful in this State. It was started here in 1911 under the guidance of Swami Nirmalananda, a direct disciple of Sri Ramakrishņa. The first Asramam was opened at Haripad in 1912, immediately followed by another at Thiruvalla. The third and the most important one was established at Trivandrum in 1924, and since then eight more have been added at other centres." "The ideals of Śrī Kamakrishna and Swami Vivēkānanda," says Mr. Padmanābhan Tampi, "have permeated the masses largely in middle Travancore where they have become almost household objects of worship, and the influence is gradually spreading. A band of local Sanyasins and Brahmacharis, in which all the communities are represented, have grown up......No distinctions of caste are observed in the Aśramas and members of different castes of Malabar can be seen living as members of one happy family in these Asramas. At all important functions in these Aśramas people of all castes take their food together and as the food served is invariably Prasad; orthodox Hindu doctrine also supports this practice......Philanthropical work is also undertaken whenever necessary in a spirit of pure service, the poor and the needy being treated in a spirit of worship......The main object in all these Aśramas is to train the Sanyasins, and Brahmacharis, to develop their personality and manifest the Lord within so that they could carry on the work of Swami Vivekananda for the spiritual regeneration of India."*

Theosophy is another movement for spiritual education. Though it is not a part of Hinduism many of its principles accord well with those of Sanathana Dharma. Theosophy, derived from the two Greek words Theos (God) and Sophia (Wisdom), means the direct knowledge of God. Its essence is that God is everywhere and in everything and that He dwells in us and in all about us. It recognises that everything that

^{*} The Travancore Census Report 1931, p. 335.

[†] This account of Theosophy was prepared by Prof. R. Srinivasan,

exists shares the Divine Life and therefore, the whole creation forms a great Brotherhood. The unity and immanence of God and the brotherhood of man are its basic truths. It reconciles the different religions by recognising the basic characteristics and culls its doctrines from all of them by an eclectic process. It reveals the glory of God's Plan which is evolution.

Birth is like the entrance into a workshop or laboratory, and since it is not possible to realise the Divine Nature in us by the experience of one lifetime, we reincarnate again and again, everytime becoming more developed in thought, feeling and action, till we realise ourselves. This circle of births and deaths is worked out under the direction of one Supreme Law, the law of action and reaction, otherwise known as the Law of Karma. This is the law of readjustment which is put into operation by every thought, feeling, word and deed. Its subsidiary expressions are that thought builds character, desire attracts objects and makes opportunities for acquiring them, and action makes our environment according as it has brought happiness or unhappiness to others. When we do evil we create discord in the universal harmony, and we must restore that harmony. The evil must be undone by new good, and the good must be reshaped to a more farreaching good. Karma is thus the result at any one time of all the thoughts, desires and actions of the past manifest in our character, our opportunities and our environment. It may limit our present, but our present thoughts, desires and actions can also change our future Karma everyday. The purpose of this long process of evolution through a series of lives is the unfolding of our Divinity. As exemplars of the fruit of human evolution are the Masters who have passed beyond men, the Rishis who, completing their human evolution, have passed beyond death and attained liberation But these perfect flowers of humanity. whom theosophy calls "Masters of the Wisdom", have

voluntarily dedicated Themselves to the helping of humanity, so that the human soul may through their ministration more easily and quickly reach perfection. They constitute the *Great White Brotherhood*, which governs the world. They permit those who fulfil certain conditions to become their disciples, so that they might hasten their evolution, and, entering the great Brotherhood, assist in its work for men.

The basic ideas of Theosophy are summed up by Madame Blavatsky, the co-founder of the Theosophical Society, as follows:—

"A clean life, an open mind, a pure heart, an eager intellect, an unveiled spiritual perception, a brotherliness for all, a readiness to give and receive advice and instruction, a courageous endurance of personal injustice, a brave declaration of principles, a valiant defence of those who are unjustly attacked, and a constant eye to the ideal of human progress and perfection which the Sacred Science depicts—these are the Golden Stairs up the steps of which the learner may climb to the temple of Divine Wisdom."

There is considerable literature on the path of Holiness, the Narrow Ancient way and its stages as well as the qualifications for treading it. The man who would enter the path must recognise unity as his aim, to be reached by utmost devotion to God and tireless service of man. The first stage, known as the Probationary Path, consists of the acquiring of the four qualifications, namely, (i) discrimination between the real and the unreal; (ii) dispassion or desirelessness regarding the unreal; (iii) the six points of conduct, (self-control in thought, self_control in action, tolerance, endurance, confidence in the God within and equanimity), and (iv) love. These bring the aspirant to the entrance of the Temple of God and His Ministers.

The morality that Theosophy teaches is based on the recognition of the One Omnipresent Life. It regards every virtue as an expression of Love and Truth and calls for their display in all contacts of life. Truth is the basis of

intellectual character and love, of moral character, and he who displays them in their fulness and completeness is the perfect man. Simultaneously Theosophy teaches that Beauty is a Law of Manifestation and places the Beautiful on a level with the Good and the True. Beauty is the essential condition of perfect work.

But while this body of doctrines is known as Theosophy, it is not necessary that any member of the Theosophical Society should believe in it. One can deny all this, and yet, accepting the principle of the brotherhood of man, become and remain a member. It is the purpose of the Theosophical Society as a whole to provoke thought on these truths all over the world. Fullest freedom of thought is enjoyed, but every member is expected to show the same respect for the freedom of thought of other members as he expects for his own. The Society has the motto "There is no Religion higher than Truth" and its objects are:—

- (1) To form a nucleus of the Universal Brotherhood of humanity, without distinction of race, creed, sex, caste or colour;
- (2) to encourage the study of comparative religion, philosophy, science and art; and
- (3) to investigate the unexplained laws of nature and the powers latent in man.

Travancore was amongst the earliest parts of India to respond to the appeal of Theosophy. The 'Ananta Lodge'

at Trivandrum was established as early as in 1883 when Col. H. S. Olcott, the President Founder of the Theosophical Society, visited Travancore on the invitation of the public. In 1903 was established the Sanathana Dharma Vidyasala at Alleppey.

The work of the Theosophical movement in that centre and the adjoining places has been conducted by the

authorities of that institution and the Alleppey Theosophical Lodge.

The Kēraļa Theosophical Federation, of which the Travancore Lodges are a part, was formed in 1913 and was registered in 1927. It is one of the earliest all-Kēraļa organisations and has held as many as fifteen all-Kēraļa gatherings and sixteen all-Travancore gatherings. The Federation interests itself in the establishment and maintenance of schools and the publication of books and pamphlets. There are also a Kaļari and a Workers' Fund attached to it. Under the guidance of the Federation the National Education Campaign was carried out in 1917, the Brotherhood Campaign in 1924, the Straight Theosophy Campaign in 1935, the Great Plan Campaign in 1936, and the Campaign of Understanding in 1937.

The members of the Theosophical Society are taking considerable interest in humanitarian work, the Art Movement and social reform. Lectures in temples were started in 1915. The scheme of lectures is now supported by grants from the Devaswom Department. Theosophists are also engaged in educational and religious work in jails.

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CHAPTER X.

RELIGION—CHRISTIANITY.

When Lord Curzon visited Travancore in 1900, he found that there were more Christians here than in the State of other Indian states. At that time the Christianity. Christian population was about seven lakhs. The Census Report of 1931 gives their number as a little above sixteen lakhs. According to Ward and Conner there were only 112,158 Christians in 1820. During the last one hundred and eighteen years the proportion of Christians to the total population has risen considerably. Out of the total Christian population of 6.296,763 in the whole of India 3,820,625 or about 60 per cent. reside in southern India and more than one-fourth of the total is found in Travancore.

"The Christian Church is a religious-moral society, connected together by a common faith in Christ, and which seeks to represent in its united life the Growth of sects. Kingdom of God announced by Christ..... Differences relating to the objects of Christian faith and ecclesiastical life early separated the church into various distinct societies, each of which commonly assumed to itself exclusively the name of the "True Church of Christ," and branded the others with the titles 'heresy' and 'schism'.* "The whole Christian religion", says Mosheim, "is comprehended in two parts; one of which teaches what is to be believed upon divine subjects; the other, The Apostles ordinarily call the how we ought to live. former the mystery or the truth, the latter godliness. The

^{*} A Compendium of Ecclesiastical History, Dr. John, C. L. Giesler, Vol. I. (Clerk's Foreign Theological Library, Vol. 1V), pp. 1 & 2.

standard and rule of both are, those books which God dictated to certain individuals, chosen for the purpose either before or after the death of Christ." * These books are the Old and the New Testaments. At first all who professed to believe that Jesus was the only Redeemer of mankind, and who promised to lead a holy life, conformably to the religion that he taught, were received immediately among the disciples of Christ. A full instruction in the principles of Christianity did not precede baptism, but followed it. Later on individuals were admitted into the sacred font only after instruction in the primary truths of religion. Certain forms and ceremonies copied from the surrounding peoples were first tolerated and then adopted. Prayers were followed by oblations of bread and wine. Fasts became popular. The simple teachings of Christ were amplified by the doctrines of eastern philosophy. The Christians of Asia Minor differed from the other Christians and especially those of Rome. In the course of a few centuries a great many sects arose each differing from others in their view of the nature of Christ, his divine and human attributes, the veneration of the Virgin and other connected matters.

The Christians in Travancore do not form a homogeneous community. There are different churches and various sects. But they are all of them guided by certain common aspirations which have evolved from a common faith in the Gospel of Jesus Christ. The accretions of the stream of time have made numerous deposits on its ancient bed favouring, in some measure, the growth and dissemination of exotic notions. But the word of Christ is still the highest authority. The chief sections of the community according to

^{*} Institutes of Ecclesiastical History, J. L. Von Mosheim: Translated by J. Murdock, pp. 101 and 102,

numerical importance, as classified in the Census Report of 1931, are:—Romo Syrians, Roman Catholics*, Jacobite Syrians, Mar Thoma Syrians, South Indian United Church and Anglican Communion. There are also other denominations which are numerically small. The more important of these are:—the Salvation Army and the Lutheran, Methodist, Baptist and Brother missions. The essentials of the faith and practice of the important churches are given at the end of this chapter.

The propagation of the faith was regarded as a sacred duty by all the people who came under its sway; for, "Jesus came and spake unto them saying, All power is given unto me in heaven and earth. Go ye therefore and teach all nations, baptizing them in the name of the Father and His Son and of the Holy Ghost." Of those disciples of the Lord who proceeded in different directions to preach the Gospel, one, the Apostle Thomas, visited Malabar and pursued his ministration. The Malabar Christians believe the visit of St. Thomas to be a historical verity, a title to the undisputed ancient character of their church.

Many are the writers of eminence who hold that the coming of the Apostle to Malabar was nothing more than a myth. "The reason why many scholars are so sceptical about the matter seems to be (1) the iconoclastic attitude towards tradition introduced by the modern Prussian school of historians, (2) the imperfect acquaintance with sources which are not available in the European languages and a general disbelief in them, and perhaps (3) a natural disinclination to believe how India which lay outside the Roman empire and is identified with Hinduism should possess the tomb of one of the twelve apostles of Jesus..."† The sub-

^{*} They may be more appropriately styled Latin Catholics.

[†] Was the Apostle Thomas in South India? Dr. P. J. Thomas, Professor, University of Madras.

ject is a much debated one in the polemics of church history. Some writers are positive that the Apostle never came to India but went instead to Ethiopia. Others contend that if at all he did come to this country it was to North-West India associated with the name of Gondophores. A third school takes the view that he preached in South India but confined his activities to the Coromandel coast. The general drift of these arguments appears to be to establish that the Apostle, wherever else he might have gone, did never visit Malabar. To some extent the actual fact has suffered in its appreciation through the bleak freezings of neglect. The political supremacy of the western nations for the last five hundred years has invested the facts recorded in their histories with an air of sanctified authority. The doubt thrown on the tradition by European writers makes it untrustworthy in the eyes of the historians.

The Portuguese and the Dutch, the French and the English, came to India allured by notions of commercial profit more than by motives of philan-The subject thropy to save the souls of those neglected. venerated the name of Jesus Christ. Portuguese identified themselves so much with the cause of papal supremacy throughout the whole world that they felt more concerned in extending their own authority and influence than in discovering ancient origins. Yet in 1517 Duartes Menezes, Viceroy of Goa, appointed a commission to search for the relics of St. Thomas. They discovered certain relics which they believed were the bones of the Saint. But that conclusion has now been proved to be wrong. The Protestant Dutch had little sympathy for the Malabar Christians who followed a creed different from theirs and scandalised them by the observance of certain peculiar religious ceremonies. The history of the French enterprise in India soon ended in a dire tragedy. And the English were obliged to concentrate their energy and resources on the conquest of a great continent before the interests of the Christian faith attracted their attention. When the British public ultimately realised that it was the duty of a Christian nation to extend the Christian faith within their possessions in the east, it was the Church of England and the Protestant missions which guided and controlled the movement. As the doctrines of the Syrian Church in Malabar differed from those of their own, neither the earlier historians nor the earlier missionaries made a sustained endeavour to discover the true character of the Malabar Church or to examine how deep it had struck its roots into the past.

A hundred years ago Hough who was Chaplain of the English Church at Tinnevelly wrote his book on the "History of Christianity in India". The Treatment of the learned author discredited the prevalent tradition. account of the Apostle's visit to Malabar, though he upheld his visit to Socotra. According to him, though certain facilities of a limited character were open to navigation, it was not probable that any but traders would venture far eastwards before the second century. The weight and measure applied by him are manifestly inaccurate. If the desire for trade and the exigencies of political ambition made travelling anything but an abnormal enterprise, the missionary who desired to carry the word of God to the remotest confines of the earth would find no difficulty in arriving at the Malabar coast from Socotra, Edessa or Antioch. The learned Chaplain emphasises the absence of what he calls the 'faintest vestiges of authentic history' in support of the coming of St. Thomas and finds an easy way to reject the tradition. What is the authentic evidence of the facts of history which are said to have transpired nearly 2,000 years ago? It is not reasonable to hope that the visit of St. Thomas could be proved by certified records in the archives of

government; nor is it right to think that the transactions should, if true, be recorded on stone or copper. St. Thomas came to India to preach Christianity, not to create historical evidence. But the position of Hough gave a pass-port to his opinions. The epigrammatic sentences of Kaye were so many nails driven into what he considered the 'coffin' of the St. Thomas story. But as that learned writer clearly expressed his obligation to Hough, virtually admitting that he made no independent investigations into the subject, his view cannot possess as much force as will be necessary to refute the claims of the Malabar Christians, put forward, repeated and recognised from the earliest times.

Later historians like Sir William Hunter and Vincent Smith, though unwilling to brush aside the St. Thomas tradition, were equally disinclined to accept the visit of the Apostle to Malabar as a historical fact. Sir William Hunter disposes of the tradition with the observation that 'modern authorities are not wanting who consider that there is no evidence for St. Thomas' labours in Madras or India proper.' Vincent Smith concedes that Mr. Milne Rae carried his scepticism too far when he attributed the establishment of the Christian congregation to the missionaries from the banks of the Tigris in the fifth or the sixth century. He admits "that a personal visit of the Apostle to Southern India was easily feasible in the conditions of the time and that there is nothing incredible in the traditional belief that he came by way of Socotra, where an ancient settlement undoubtedly existed."* But his finding on the evidence is that the actual fact of such personal visit cannot be either proved or disproved. According to E. J. Rapson, the legend of St. Thomas has been furnished with an historical setting which is chronologically possible. But he does not express a definite opinion. Mr. Logan, the author of the Malabar Manual, concedes that "there is no inherent improbability in the tradition that the Apostle Thomas was one of the

^{*} Early History of India, V. A. Smith p. 235.

earliest immigrants from the West," though he attaches considerable weight to the absence of direct contemporary proof. But so long as the events of the period are not borne out by any authoritative chronicles, official documents or authentic lithic records, no rigorous standard can be legitimately applied to exclude the value of the tradition which, as he himself admits, is "implicitly believed by the generality of the adherents."* K. P. Padmanābha Mēnon, who devoted the best part of his life to researches in the history of Kēraļa with the help of a judicial training and a phenomenal industry, was inclined to respect the tradition as being worthy of acceptance.

The evidence available on the subject and the circumstances which explain and supplement it point unmistakably to the truth of the traditional Landmarks in account. The first landmark in the realm of the tradition. tradition which has solidified itself during the last nineteen centuries is the belief preserved in the memory of the Malabar Jews. They affirm that when they landed in Malabar in 69 A. D. they found there a colony of Christians.† In the first century there arose three tales, one in Alexandria, another in the Punjab, and a third in South India. The second and the third were woven into a harmonious fabric in Edessa. These four places are separated from each other by enormous distances of more than two thousand miles. Milne Rae is not prepared to believe that there were Jews, Christians or Brahmans in Malabar. But the researches of scholars have lifted the veil which concealed the light from him. The removal of the bones from Mylapore to Edessa appears to have been effected in the

^{*} Malabar Manual, Logan, Vol. I, p. 199.

[†] Asiatic Journal, Vol. IV, cited by K. P. Padmanabha Menon, in his History of Kerala Vol. I.

The Syrian Church in India, Milne Rae p. 69.

middle of the second century. In 394 A. D. the casket containing the bones was removed from its former place to the great church at Edessa erected in honour of the Saint. In 442—443 A. D. Anatolius the general made an offering of a silver casket to hold the relics.

From the third century there is recorded evidence from various sources which by its cumulative warrants the truth of the story. One of Recorded evidence. the earliest is the Apocryphal Acts of Juda Thomas of which versions exist in Syriac, Greek and It mentions the visit of St. Thomas to Malabar. Of these the earliest, Syriac, is assigned to the middle of the third century A. D. Hippolytus who lived in the latter part of the second and the early years of the third century mentions the martyrdom at Calamina. It is referred to by writers in the latter part of the third century and repeated by St. Jerome about 300 A. D. The Hymns composed in the fourth century by St. Ephreim give certain important facts about the Apostle. When St. Ephreim wrote there was a church at Edessa named after St. Thomas. St. Chrysostome (341 to 401 A.D.) noticed the fact that the tomb of St. Thomas was in the east as much venerated as that of St. Peter at Rome. The hymns cited by Bishop Medlycott throw considerable light on the subject.*

Towards the close of the sixth century Gregory of Tours recorded that the holy remains of the Saint were removed from Calamina to the city of Edessa in Persia and there interred. "In that part of India where he first rested", says he, "stands a church and monastery of striking dimensions elaborately designed and adorned". In the ninth century King Alfred of England dispatched an embassy under Sighelon to the shrine of St. Thomas at Mylapore. Marco Polo and John of Montecarvino saw the shrine at Mylapore in the closing years of the fourteenth

^{*} Vide India and the Apostle, Thomas, pp. 22-31.

century. Friar Odoric states that in Ma'abar* was laid the body of the blessed Thomas the Apostle and records the details of the tradition. Marignoli in the fourteenth century and Nicolo Conte in the fifteenth add their share of evidence in support of the tradition which was current throughout the Christian world.

The evidence furnished by belief and conduct is equally uninterrupted. There is an annual festival celebrated in the Mylapore church in commemoration of the death of the Apostle. There is another at Edessa to perpetuate the memory of the arrival of his bones there. The former is on the 21st of December, while the latter takes place on the 3rd of July. The Malabar Christians frequently participate in the Mylapore festival. The memory of the Apostle is honoured in most of the Christian countries. Sacramentaries, martyrologies and calendars of the Eastern and Western churches make prominent mention of him, and the prescribed ceremonies are duly performed. It is significant that no country other than India claims the honour of having witnessed his martyrdom.

Claudius Buchanan refers to the visit of the Apostle in these words: "The fact is certainly of little consequence; but I am satisfied that we have as good authority for believing that the Apostle Thomas died in India as that the Apostle Peter died at Rome". This is the view expressed by one who was a member of the Church of England and who was not interested in making a long pedigree for the Malabar Christians. The official report made by the Rev. Dr. Kerr of the Government of Madras lends additional weight to the opinion expressed by Buchanan. The visit of St. Thomas came in for judicial consideration in the Travancore Court of Final Appeal. "There is a tradition"

^{*} Ma'abar means the Coromandel Coast.

[†] Of the year 1806 A. D.

said Justice Ormsby, in the judgment of the Syrian Church case *, "that that church (Malankarai) was found about 52 A. D. by Apostle Thomas, a tradition which is mentioned by every writer on the history of the Malabar Church".

The St. Thomas tradition derives additional strength from the circumstances that it has firmly maintained its ground though from early Portuguese times investigations were repeatedly made to examine its genuineness. The Portuguese Viceroy Nuno da Cunha ordered an inquiry to be started by competent agency; and King Emmanuel recommended "most particularly" to the governors of India to "ascertain as carefully as possible what knowledge the Indians possessed of the life of St. Thomas including the details relating to his mortal remains". Archbishop Menezes, the uncompromising defender of the sole and original primacy of Rome, was obliged to encourage the celebrations of the St. Thomas festival at Diamper. A dignitary of the rank and ability of Menezes, pledged to promote the claims of the papacy, would never have certified the tradition of St. Thomas by his own authority and strengthened it with his own homage unless, on proper enquiry being made, he was satisfied that the account handed down from generation to generation bore in it the unambiguous impress of truth.

Nor is the material evidence of old finds and lithic records wanting to complete the catena. In 1568 A.D. some Portuguese discovered a white marble slab, while digging to lay the foundations of a church at Mylapore. This stone was 2 ft. long by 1 ft. 6 inches wide, on which was carved in relief a cross. An inscription seen on it refers to the death of Thomas at Mylapore and refers also to the kings of Malabar and

^{*} Second Appeal No. 3 of 1061.

Coromandel and of Pandy who willingly resolved to submit themselves to the law of St. Thomas.

Alfonso De Sousa, the Portuguese governor, obtained a few years earlier in 1543 A. D. a plate of copper engraved with half-obliterated letters which when deciphered was found to bear evidence of a donation, from a king to the Apostle Thomas, of land for building a church. When the foundations of the fort at Goa were being dug, they discovered ruins of an old building, and among them a bronze cross with the figure of Jesus Christ fastened on it.

Earlier still in 1521 A. D. a sepulchre at Mylapore was found, containing bones which were taken to be those of the Apostle. The accepted version being that the bones were taken away to Edessa, it may be argued that the conclusion is marred by the discovery of the sepulchre. The answer is that the authorities are agreed that the bones allowed to be preserved in Mylapore were those of one of the Apostle's disciples killed at the same time. These three finds taken together would show that the traditional account of St. Thomas coming to Malabar, building churches, and receiving the crown of martyrdom at Calmina is not a figment as is sometimes attempted to be made out. If the facts* stated above are true the other evidence bearing upon the subject would receive strong corroboration.

It is stated that the Christians found in south India by the Portuguese at the time of their landing were heretics who had imbibed the errors of Nestorian teachings.† The self-interest of the Catholic missions would not normally engender in the missionaries a desire to recognise the ancient origin of a heretical church. Yet they make an emphatic statement that the finds afford a wonderful proof, which no cavilling can gainsay, of the antiquity

[•] These facts are taken from 'Catholic Missions in Southern India', Strickland and Marshall, pp. 31 and 32.

[†] Do. p. 33.

and apostolicity of the main teaching of the Holy Catholic Church in India. The references to material objects and the mention of specific details furnish some guarantee of truth though the acceptance of hearsay information appears to have tainted the reasoning. To the latter category belongs the statement that in a short time after St. Francis preached on the Travancore coast "it was almost entirely Christian" and that "the majority of the inhabitants of the district are even now Christians."*

Bishop Medlycott sums up his views of the Apostle's Medlycott's views. visit thus:—

- 1. He would have preached through the whole of that tract of country lying south of the Caspian Sea, the "Mare Hyrcanum" of his days—east of the mountain range of Armenia and of the Tigris, down to Karmania in southern Persia.
- 2. It would be during this first apostolic tour that he came in contact with the north-western corner of India at Gondophares' court.
- 3. After the demise of the blessed Virgin Mary when, according to ecclesiastical tradition, the second dispersion of the apostles took place, Thomas commenced his second apostolic tour. Probably, from Palestine he travelled into northern Africa, and thence, preaching through Ethiopia, he passed on to Socotra where he must have stayed some time to establish the faith. Going thence he would have landed on the west coast of India.
- 4. From Malabar the Apostle would find no difficulty in crossing over to the Coromandel coast. He might easily travel by any one of the several passes across the ghats known and regularly used by the natives in ancient times for intercourse between both coasts, as being the shorter and the less dangerous route for such communication.

^{*} Catholic Missions in southern India, Strickland and Marshall, p. 35.

5. It would be on the Coromandel coast that he ended his apostolic labours. This is upheld by the joint traditions of the Christians of the Coromandel and the Malabar coasts.

The array of authority against the truth of the St. Thomas tradition is large; Basnage, La Croze, Tillemont, Renadot, the Abbe Fleury, Burnell, Authority against the tradition. Kave, Milne Rae and Rev. Mateer, are names in that list. But a large volume of material bearing on the subject has now been brought to light, which goes to prove that the visit of St. Thomas to Malabar and his ministration in this country are historical facts. This result of modern research was in some measure anticipated by Neander who published his General History of the Christian Church in 1842. "The ancient Syro-Persian Church," says he, "whose remains survive to the present day on the coast of Malabar in the East Indies boasts of, as its founder, the Apostle Thomas and professes to be able to point out the place of his burial. Were this a tradition handed down within the community itself independent of other accounts, we should not be inclined to yield credence to it; but neither on the other hand should one be warranted in rejecting it absolutely". The fact relied on by Kaye that towards the close of the second century the Gospel had reached the ears of the dwellers on the south Indian coast is excellent testimony to the truth of the story, particularly because it amounts to an admission by a writer who is sceptical about the visit of St. Thomas. So long as there is no proof that it was some person other than St. Thomas who introduced Christianity into Malabar, it may in justice be believed that the visit of St. Thomas is a historical event.*

The St. Thomas tradition is not a creation of fancy. It is not a legend not founded on fact. On the other hand,

^{*} The theory that Christianity was introduced into south India by St. Bartolomew has little foundation,

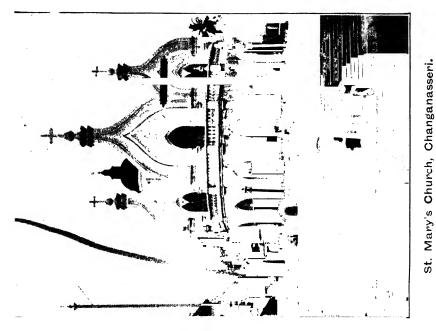
the co-existence of co-ordinate facts points to the definite conclusion that the Apostle did come to Malabar to make the earliest beginnings for the propagation of Christianity.

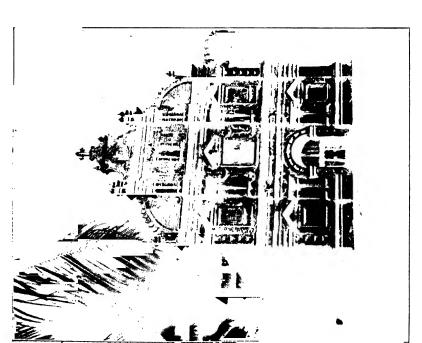
The majority of the Christians in Travancore are called Syrian Christians. The Syrian Church of Malabar is the oldest church in the whole of India. Ori-The Syrian ginally, some people of Syrian origin must Christians. have settled down on the Malabar coast. though their number might have been very limited. Gradually their numbers increased by the admission within their ranks of the off-spring of intermarriages between the members of successive batches of immigrants and the inhabitants of the land. It is stated by certain authors that "the members of the Church of Malabar are called Syrians not because they have Syrian blood in their veins but because they have a Syrian liturgy. They are not of the Syrian nation but of the Syrian rite. The name in this case is not an ethnological or geographical designation but is purely ecclesiastical."*

"The discovery of the Syrian Christians of St. Thomas on the Malabar coast was a fruitful source of perplexity to both sections of European Christendom", says Dean Stanley, who quotes a passage from Gibbon. "Their separation from the western world had left them in ignorance of the improvements or corruptions of a thousand years; and their conformity with the faith and practice of the fifth century would equally disappoint the prejudices of a Papist or a Protestant".† The distinctive characteristic of the Syrian Church in Malabar is its veneration for the text of the Gospel and the Syriac language in which it was revealed. It is said that "the

^{*} Milne Rae in the Christian College Magazine of Sept. 1890, p. 184.

[†] Lectures on the History of the Eastern Church, A. P. Stanley, p. 42.





Old Church, Kottayam.

eastern Church was, like the east, stationary immutable; the western, like the west, progressive and flexible." "This distinction is the more remarkable", says Stanley, "because, at certain periods of their course, there can be no doubt that the civilisation of the eastern Church was far higher than that of the western".* While in the west the utmost attention was bestowed to the propaganda of converting the heathens, the children of the eastern Church who settled in Malabar desired only to keep intact the treasures which they possessed. In the west the principles of a Universal Church and Universal Empire combined to erect a virtual despotism in matters of theology and church discipline, rendering the common people to unqualified submission to the clergy for several centuries. In the east the lay public appears to have occasionally exerted influence in shaping the policy of church government.

In Malabar the Christians of St. Thomas were in certain respects in a better position than their co-religionists in their ancient home; for, while in Syria and Persia the independence of religious profession and practice suffered on account of imperial vagaries and Moslem intervention, the Christians of Malabar were able to continue their peaceful existence among a population tolerant and friendly, under the protection of rulers, who, though attached to their own Hindu faith, appreciated the justice and the wisdom of permitting the immigrants and their descendants to follow their own path of salvation.

Isolated attempts appear to have been made from early times to place the Malabar Christians directly in communion with the Church of Rome.

From the coming of the Portuguese, however, a sustained policy of proselytism was pursued under the authority of the Papal See to modify their

^{*} Lectures on the History of the Eastern Church, A. P. Stanley, p. 26.

practices. From the beginning of the nineteenth century Protestant missions have also been making strenuous endeavours to effect conversions. But, while profiting by association with the peoples of the west, the Syrian Christians of Malabar have always kept their traditions substantially intact.

As the first general council at Nicaea was held in 325 A. D. the faith which was introduced into Malabar by St. Thomas must have been of the precontro-The First churches. versial days. The Apostle himself is said to have founded seven churches on this coast, namely those at Pālayūr, near Chāvakkād in British Malabar, Maliankara near Cranganore in the Cochin State, Köttakkäyal near North Parūr, Kokkamangalam or South Pallipuram, Quilon or Kollam, Niranam in Thiruvalla, and Nilakkel near Chayel, the last five being in Travancore. It is believed that he preached and laboured for many years in Malabar. He converted a large number of persons from different castes including several Nampūthiri Brahmans. Of these families Śankarapuri and Pakalomattam were the most prominent, and these were set apart by him for sacred orders.

Some of the Portuguese writers say that there was persecution of the Christians after the death of Apostle

Thomas. During the latter half of the third century Thomas the Manechian of 'the school of Manes'* laboured in south Travancore. He tried to convert many Christians to his faith. A few families yielded. They are now called the Manigramakkar. Only eight families stood fast and they were called Dhariyaykkal. Their descendants are to this day to be seen in south Travancore in the village of Thiruvithamcodu.

^{*} Some hold that it was poet Manika Vachakar who attempted conversion.

Knava Thoma or Thomas Cana, a merchant, is said to have visited Malabar in 345 A. D. bringing with him several priests, students, a bishop and Knava Thoma. Christian women and children, from Baghdad, Nineveh and Jerusalem. Many scholars hold that Cana came only in the eighth or the ninth century and that he was a Nestorian. According to the traditional account, he built a church at Mahādēvarpattaņam where the Syrian liturgy was followed in the worship. It is said that he married two wives, one of higher and the other of lower Hence the division of the community into Northerners and Southerners (Northists and Southists). Another theory regarding the division into two sections is that the Southerners were the new immigrants who were brought in by Thomas Cana and who settled in the south street in Cranganore, while the Northerners were the old indigenous. Christians who had the north street for their origin. The cleavage between the two sections is still kept up, as custom does not permit intermarriage between them.*

The churches of Malabar were often visited by priests and bishops and there is prominent mention made of them in the accounts of travellers. In A. D. 190 Connection Pantaenus of Alexandria is said to have maintained. visited India. Eusebius, bishop of Caessarea (264-340 A. D.), mentions the visit of Pantaenus. Sir William Hunter conjectures that the India visited by Pantaenus was Malabar. Cosmos Indicopleustes, the Alexandrian traveller, mentions the existence of the Christian church in Malabar. He visited Malabar and Ceylon in 522 A.D. More than a hundred years later Jesujabus Adjabinus, Nestorian Patriarch (650-660 A.D.), appears to have written to the Metropolitan of Persia, t who was under

^{*} The Cochin State Manual, 1911, pp. 218-219.

[†] In the days of Cosmos in the 6th Century the Church of Malabar was subject, in matters ecclesiastical, to the Metropolitan of Persia.

jurisdiction, complaining against the unsatisfactory condition of India down to Quilon caused by the absence of bishops. In the eighth century one of the bishops in India obtained the rank of metropolitan from the patriarch of Babylon. There was the practice of inviting all the bishops to meet the patriarch in synod once in six years, but latterly those in distant countries including India from which travelling was 'hindered by mountain ranges infested with robbers and by seas fatal with ship-wrecks and tempests, were exempted from appearing. But it was declared incumbent upon those metropolitans to send every sixth year letters of consent and union setting forth any business which required decision or direction.' Express instructions were also given that from every country money should be collected and sent to headquarters. Thus we see that the Christian church existed on the coast from very early days.

The details of worship and matters connected therewith in these churches are thus described by Mackenzie,:-"It is usually supposed that the Liturgy Old forms of which the Christians on this coast used worship. was the Liturgy of All the Apostles, composed by St. Adaeus and St. Meris. This Chaldean Liturgy was adopted by the Nestorians when they were expelled from the Roman Empire and fled into Persia. But Dr. Neale. maintains that the Liturgy used on this coast was collateral with, rather than derived from, the Chaldean Liturgy of All Apostles and is clearly a much earlier form of a most remote antiquity much earlier than the fifth century, and at the very latest, of the beginning of the 4th century, but which may have come from Apostolic times. In the Liturgy of St. James there is a phrase 'gave to us His Apostles and disciples', which is cited to show that the Liturgy was written by St. James himself. So in this Liturgy there is a passage which has no parallel in any

known Eastern Rite and may possibly have been written by the Apostle St. Thomas himself. The passage is, 'Grant moreover, My Lord, that the ears which have heard the voice of Thy songs, may never hear the voice of clamour and dispute. Grant also that the eyes which have seen Thy great love, may also behold Thy blessed hope ".*

Very little is known of the history of the Malabar Church for about eight centuries prior to the coming of the Portuguese. The history of this period "is no more than a few stray names said to be of bishops struggling hard for spiritual sway over Malabar......". During these centuries of absence of regular intercourse with the mother church, the Syrians appear to have accepted the help and counsels of Nestorian bishops, Jacobite patriarchs and Latin missionaries.†

But the existence of the Malabar Church was for long known in the remotest parts of Christendom. Pious people in the west, even King Alfred from Noticed by the distant England, contemplated the Indian westerners. Church in the exercise of their devotion. sending alms for the benefit of the institutions which kept alive the memories of St. Thomas and St. Bartolomew. John of Montecorvino, a Latin missionary, visited the Christian settlements of Quilon on his way to China and offered worship in the Church of St. Thomas the Apostle. He also baptised about a hundred persons. Marco Polo, the celebrated Venetian traveller, refers to Nestorian' Christians of Malabar and mentions the St. Thomas tradition. So does friar Jordanus who visited Quilon and gave information to Pope John XXII who became so much interested in the Nazarani Christians of that city that he appointed Jordanus

[•] Travancore State Manual, Nagam Aiya, Vol. II, p. 140

[†] Travancore State Manual, Nāgam Aiya, Vol. 1I, pp. 123—24.

himself as the bishop of Quilon and sent him with his credentials. His Holiness said:—"Praying we beseech that divisions cease and clouds of error stain not the brightness of faith of all regenerated by the waters of baptism; and that the phantom of schism and wilful blindness to faith unsullied darken not the vision of those who believe in Christ and adore his name." The account is corroborated by John Marignoli (1347 A. D.) who speaks of the St. Thomas Christians of Quilon with considerable warmth. He erected a marble pillar with a stone cross on it with the Pope's arms engraved "intended to last till the world's end." Learning at first hand the toleration extended to the Christians by the ruling family of Travancore, the friar paid a visit to the Queen, the "glorious queen of Sheba" by whom he was received with great courtesy.*

The separation of the Malabar Church into various denominations had its origin in numerous historical events which have transpired in the course of many centuries. The Nestorian Church dates its origin from the times of the dispute between the followers of Nestorius, the patriarch of Constantinople, and Cyril of Alexandria. Nestorius abhorred the confusion of the two natures and persisted in the discrimination of the humanity of Jesus from the divinity of Master Christ. The Blessed Virgin he revered as the "Mother of Christ", but his ears were offended with the rash and recent title of the "Mother of God".

The Nestorians differ from the other Christians in the following particulars:—"that there are in Christ Differences in two natures and two substances each doctrine. of which has its own personality; that they reject the Council of Ephesus (431 A. D.); that

w. The Wonders of the East and Cathay and the Way Thither, Friar Jordanus, edited by Col. H. Yule.

they will not call Mary the Mother of God; and wholly reject the expressions God was crucified and died; that they admit no natural and personal but only a friendly union of the Word that was God, execrate Cyril as being a wicked wretch and venerate Nestorius and Theodorus of Mopsuestia, as being saints; that they worship no images; and perform their worship, which is very simple, in the Syriac language. Together with baptism which they generally administer on the 40th day after the birth, and the Lord's supper in which they use leavened bread; they make the consecration of priests to be a sacrament. They also practise anointing with oil, as a ceremony of worship; and likewise in slight diseases, and even in commencing journeys, as a sort of consecration ".*

The teachings of Nestorius acquired a new energy by the excesses of the victors and the misdirected energy of temporal powers. Within a few years Spread of after the expulsion of Nestorius, Barsumus, Nestorianism. one of his followers, became bishop of Nisibis in 435. A. D. Through his influence the Persian monarch Pherozes permitted the Nestorians to make Seleucia and Ctesiphon in Persia their principal sees, although the Christians who adhered to the opinion of the Greeks were expelled. Seleucia became the headquarters of Nestorianism. From the school of Nisibis erected by Barsumus the emissaries of Nestorianism carried its doctrines to Egypt, Syria, Arabia, India, Turkey and even to China.† The sees of Seleucia and Ctesiphon were afterwards removed to Baghdad and then to Mosul, the bishop taking the title of Patriarch of Babylon. A section of the Chris-

^{*} See foot note in Institutes of Ecclesiastical History, J. L. Von Mosheim. Translated by James Murdock, Vol. 1. p. 478.

[†] Institutes of Ecclesiastical History, Vol. I, J. L. Von Mosheim. Translated by James Murdock, p. 478.

tians of India thus became subject to the ultimate control of the Patriarch of Babylon. They received their bishops from Babylon and were operated upon by Nestorian teachings. Their practices also received accretions from the usages of peoples with whom they were obliged to place themselves in contact. But the fundamentals of the faith remained unimpaired. The activities of the Nestorians spread over wide realms and influenced many nations. To those who made their progress by sea and land, Malabar lay near enough and the Syrian Christians of Malabar received them with open hands.

For three centuries after the Hijira, Nestorianism did not suffer on the spread of Islam. The Muhammadans at first used their power with moderation Its opportunities. and were indulgent towards the Christians, especially to those who opposed the decrees of Ephesus and Chalcedon, among whom were the Nestorians. In the seventh century the condition of the Nestorians and Monophysites under the new lords of the east was far happier than before. While the Greeks were oppressed and banished. these two sects secured everywhere a commanding position. Jesujabus Adjabenus, Chief Pontiff of the Nestorians, concluded a treaty first with Muhammad and afterwards with Omar and obtained many advantages for his sect. The successors of Muhammad in Persia employed the Nestorians in the most important affairs of both the court and the provinces; nor would they suffer any patriarch, except the one who governed the sect, to reside in the kingdom of Babylon. In the tenth century the Nestorians and Monophysites began to suffer at the hands of the Saracens. assumed dangerous proportions. In the interval, however, the Nestorians from Babylon and the surrounding places utilised the opportunities of association with Muhammadan sailors and succeeded in establishing and maintaining an intercourse with the Christians of Malabar.

For a considerable time Nestorian doctrines appear to have obtained currency in some measure in the Malabar churches. Cosmos Indicopleustes says In Malabar. that bishops to Malabar were sent from Persia where they were consecrated. According to him the doctrines at that period were those of the Nestorians; for. the Primate of Persia was at that time subject to the Nestorian Patriarch of Seleucia. Thus according to some authorities the Malabar Church became Nestorian so early as 522 A. D.* From a letter written by the Nestorian patriarch Jesujabus Adjabenus it may be gathered that he took special interest in the Christians of Malabar.† In the eighth century the patriarch of Babylon gave the dignity of metropolitan to one of the bishops in India.1 In the Nestorian councils held in Persia on various occasions the Malabar Church was uniformly reckoned. as one of the districts of their own Persian Church. Thus we find the Nestorian Patriarchs of Seleucia claiming jurisdiction over the Indian Church in which the Church of Malabar was included. Marco Polo who visited the coast in the 13th century mentions the prevalence of Nestorianism among the St. Thomas Christians of Malabar. Nicolo Conte (1428-30) found near the tomb of St. Thomas Nestorian heretics who, he says, were spread throughout India as Jews in Europe. In the Synod of Diamper it was amply found that errors of Nestorianism had permeated the whole of Malabar. The author of the Madras District Gazetteer of Malabar and Anjengo says that Menezes succeeded in particularly inducing the whole of the Syrian Church to disown "the heresies and doctrines sown among them and introduced by

^{*} The Land of the Perumals, 1863, Francis Day, p. 215. Also History of Kerala, K. P. Padmanabha Menon, Vol. II. p. 480.

[†] Christianity in Travancore, Mackenzie, p. 5.

I Ibid.

⁵ Church History of Travancore, C. M. Augur, p. 23.

schismatical prelates and Nestorian heretics that governed them, under the obedience of the Patriarch of Babylon.* But it does not appear that all the Malabar Christians accepted Nestorian doctrines. It is definitely asserted by some that they held communion with the Pope as a body.

According to Mosheim the extreme opponents of Nestorianism outside the Persian Empire fell into Mono-Jacob Baradæus. Physitism which professed only One Nature in Christ. The Monophysites condemned at Chalcedon in 451 A. D. were eventually split up into different sects. When they were persecuted and "were all but hopeless of preservation, and very few of their bishops remained, some of them being dead and others in captivity, a monk named Yakoob Boordhana commonly known as Jacob Baradæus, who was of the school of Severus of Antioch, restored their fallen state". It is from this Jacob Baradæus that the Jacobites derive their name.

The Jacobites are called Monophysites by very eminent writers as Gibbon, Mosheim, Stanley, Neander and Bury, names which by their very mention should compel the acceptance of the nomenclature in matters of history. The periodic sentences of Gibbon embellished by genius and historical erudition must have been responsible in shaping the opinions of later scholars. It is true that the Jacobites believe in the One Nature theory but at the same time they distinguish the formula enunciated by Eutychus, the founder of Monophysitism. Eutychus maintained that the human nature of Christ was absorbed in the divine nature; in other words, that "divinity is the selection."

^{*} Madras District Gazettenes of Malabar & Anjengo, pp. 203-204.

in Christ; the humanity being absorbed in it". The Jacobite Christians of Malabar accept the one nature theory. But they maintain that the human nature does not get absorbed in the divine nature. It is for that reason that in the ordination ceremony in the Jacobite Church the memory of Eutychus is cursed. The Malabar Jacobites do not accept that they are Monophysites. They hold a position midway between Roman Catholics and Monophysites.

The Jacobites consolidated themselves into a permanent body under the Patriarch of Antioch. Under him was the Maphrian or Catholicos whose residence Malabar and the was at Tigritum in Mesopotamia. Malabar Patriarchs. is said to have been under his jurisdiction and the connection seems to have been kept up though with interruption. While the Nestorian patriarchs of Seleucia were trying to exercise jurisdiction over India, the Jacobite patriarchs of Antioch were also doing the same through their catholicos. Francis Day in his 'Land of the Perumals' mentions a Jacobite Bishop from Alexandria who came to India in 696 A. D. In a note on page 25 of 'India Orientalis Christiana it is stated that Renadot quotes Allatius as saying that the patriarch of Antioch claimed to have jursidiction in India though there is no record that they ever sent Bishops there. Nilus Doxopatrius (1043 A. D.) mentions that India was under the Patriarch of Antioch. The Nestorian Patriarch Alexander III sent up a petition to the Caliph of Bagdad stating that the Catholicos under the patriarch of Antioch was sending bishops for countries under him.* Buchanan observes: "In a conversation with the Portuguese the Syrians said 'we are of the true faith whatever you from the west may be; for we came from the place (Antioch) where the followers of Christ were first

[•] The Travancore State Manual, V. Nagam Aiya, Vol. II. p. 124.

called Christians".* Thus it is seen that the Jacobite Patriarch also had some kind of supremacy, though interrupted, over the churches of Malabar and that there were many Jacobites in Malabar at the time of the coming of the Portuguese.†

The Roman see also appears to have realised the necessity of extending its authority and bringing within its spiritual jurisdiction the countries of the Roman mission. east. But even in Europe the authority of aries. the Pope, however unassailable in theory, suffered in its actual exercise through the growth of national patriotism under the leadership of powerful monarchs. Eventually the papacy won its triumphs with the help of its weapons of anathema, interdict, and excommunication. Henry I of Germany, Philip Augustus of France, and the Emperor Frederick Barbarosa began to question temporal authority of Rome. Some among the clergy sympathised with these aspirations and rendered indirect help to resist the claims of the Pope. The first streaks of the coming reformation also made their appearance in the horizon. In the middle of the fifteenth century papal authority suffered heavily on account of the Babylonian Captivity. A rival Pope exercised the functions of St. Peter at Avignon in utter disregard of the occupant of the Holy See of Rome. While the authority of the Roman Church was thus rapidly declining in Europe, the discoveries in the east and the west enabled her to extend her empire. She did not omit to avail herself of these advantageous circumstances. Missionaries from Rome had found their way to the Malabar coast from very early times. The

^{*} Christian Researches in Asia, Bushanan.

[†] There is another view that these patriarchs who claimed India were the Greek patriarch of Antioch and not the Jacobite patriarch. It is stated that in those days the Jacobite Patriarch claimed no jurisdiction in India. Vide 'The Syrian Church of Malabar, Rev. Dr. Placid, p. 16.

first Latin missionary who is known to have visited India was John of Montecorvino. A Dominican friar, Jordanus, visited Quilon in 1321 and 1324. In 1328 Pope John XXII consecrated him as bishop of Quilon and in 1330 sent him forth with credentials. John De'Marignoli who was sent out by the Pope in the same century on an embassy to China halted in Travancore on his return voyage. He lived in a church of St. George belonging to the Latin Communion. But the emissaries of Rome did not meet with any considerable success in Malabar till the arrival of the Portuguese. The Syrian Christians formed an important community, though scattered in different places under the political authority of a number of Hindu rulers.

We are on firmer ground in relating the history of Christianity in Travancore and Malabar after the advent of the Portuguese. In his first expedition in The coming of the 1497 A. D. Vasco de Gama was so much Portuguese. engrossed in turning the commercial success that he had neither the leisure nor the inclination to interest himself in the Malabar Christians, though the banner which was granted to him by King Emmanuel was embroidered with the Cross of the Military Order of Christ. In 1500 A. D. came Alvares Cabral, who, on his return to Portugal, took the Indian Christians to the prominent notice of his king and people. The king took deep interest in spreading the Christian faith. He made abundant provision for proselytism by despatching eight Franciscan friars, eight chaplains and a Chaplain Major along with the fleet under Cabral's command. Friar Miguel Vaz who was taken by Vasco de Gama on his former visit and who was converted in Portugal, also returned to Malabar with Cabral. When Gama came a second time the Christians sought his help against the Moslems, presenting him with a sceptre and undertaking to be the faithful subjects of the king of Portugal. The admiral was liberal in his promises but

was unable to give them any material assistance. However, he pleased them in another manner. "He dressed his ships with flags, assembled around him his most brilliant suite, fired a salvo with all his artillery, formally accepted the sceptre in the name of the king of Portugal and dismissed with gifts the Christian envoys, assuring them that fleets more powerful would shortly arrive, to free them from the molestations of their neighbours".

The Portuguese were zealous of the propagation of Christian faith and they avowed that it was one of the main objects of their enterprise in the Friendly relations. east. At first they welcomed the Syrians as brother Christians. They did not make any attempt to interfere in their religious doctrines. The Syrians in their turn were gratified at the advent of their co-religionists from Europe. It would appear that there were then no doctrinal disputes among the sections of the Malabar Christians.* A friendly policy was followed by the Portuguese in all their dealings with the Syrians. "They built and repaired churches of the Syrians, were going (since 1517) with the Syrians in pilgrimage to the tomb of St. Thomas at Mylapore, associated Syrian priests with them in the work of converting pagans, etc., etc. In one word, as Fr. Castetes, S. J., observes; "Common solemn religious services in both rites were even performed in the same church to the common edification of all ".

The bishops of the period were Mar John, Mar Thomas, Mar Jaballaha, Mar Denha, and Mar Jacob. Of these Mar John and Mar Thomas were consecrated at the request of the Malabar Christians by the Nestorian Patriarch Simeon. The others obtained consecration from Patriarch Elias his successor. From the letters of Mar Jacob to the king

^{*} The Latin and Syrian Heirarchies of Malabar, V. A. Pascal; Preface, p. 4.

of Portugal it appears that he was on friendly terms with the Portuguese clergy, notwithstanding differences of opinion on the right of administering baptism.

The Portuguese did not wait long to begin their proselytising activities in Malabar. The missionaries who came with Cabral and Vasco de Gama proceeded from Cochin southwards along the coast, converting many among the fishing folk and pursuing their activities in the interior with some success. They proceeded as far as Cape Comorin and beyond the limits of Travancore to the coast.

The Syrian Christians were under the Archbishop of Angamale. He appreciated the value of the friendship of the secular powers upon whom his own: Changes in rites. security and that of his flock largely depended. The Franciscan friars then began to introduce reforms in the beliefs and customs of the Christians. "They introduced", says Kaye, "the use of the Holy Penitence and two other sacraments which these Christians deny, and they deterred them from the abominable error of consecrating in the Mass the sacred Body and Blood of Christ in lumps of rice and palm wine. Also they made them restore the cult of images they had given up through heresy. The friars preached to them the Gospel and expurgated their books from any heretical matter"..."The over-bearing policy," he continues, "began openly to assert itself; and the Christians of St. Thomas saw their independence threatened by races whom they considered as little better than idolators in religion and buccancers in active life". Again he says:-"The Syrian Christians shrank with dismay from the defiling touch of the Roman Catholics of Portugal and proclaimed themselves Christians and not idolators when the image of the Virgin Mary was placed before their offended eyes. But it is certain that the Malabar Christians

had never been subject to Roman supremacy and never submitted to Roman doctrines".*

These statements of Kaye may be accepted if they are understood to mean that the Syrian Christians as a body did not submit to the guidance of Rome. But the uncompromising dislike of the Catholic religion which induced him to speak of "the defiling touch of the Roman Catholics" is as unhistorical as it is unfair. That large numbers of Malabar Christians accepted the Catholic faith as expounded by the Roman priests is beyond doubt. But the religious faith of the St. Thomas Christians which graw from more to more in states ruled by Hindu monarchs, drawing its sustenance from faith and self-reliance and consecrated by the practice of centuries, maintained itself with tolerable vigour. resisted the efforts of the missionaries to introduce the Latin rite and the veiled intimidations of a secular power which backed its forays with the resources of a growing empire supported in the maintenance of legal right by the Golden Bull of Pope Alexander VI.

The Albuquerques landed in India in 1503 and laid the foundations of political influence in Cochin by helping the rāja against the Zamorin of Calicut, building a fort which soon became a religious centre. A church was built there and dedicated to St. Bartolomew and the members of the various religious orders settled down there in large numbers. Alfonso landed at Quilon where he found 25,000 Christians. Deeply interested in their welfare, he secured for them from the king of Quilon the confirmation of ancient privileges.

The king of Portugal was following the progress of affairs in the eastern waters and the Indian coast with deep interest. The Pope was doing it with equal vigilance. He held a solemn thanksgiving in honour of the great things achieved by Albuquerque and his men. However,

[•] History of Christianity in India, G. R. Kaye.

the Portuguese were often at conflict with the Muhammadans, Arabs and others, who made a determined effort to preserve the commercial profits which they had been enjoying for centuries. Frequent fights ensued between the two parties. Some of them, for example those at Cannanore, Calicut and Quilon, were attended with serious loss of life and property. The Portuguese commander pursued the Muhammadans to Vilinjam and burned the place which gave them refuge. The latter retaliated by buring the St. Thomas Church at Quilon. In 1516, however, the queen of Quilon agreed to rebuild the church. She also gave permission to her subjects, whether Hindu or Muhammadan, to embrace the Christian faith if they chose.

But the help of the Portuguese was not a blessing to the Indian Christians. Separated from the great centres of the Christian religion and immune from the dangers of schisms and Muhammadan troubles the Syrians in Malabar conducted their worship in the way of their conscience, turning to Antioch, Babylon or Jerusalem only to secure the services of priests properly ordained, in order to keep up the continuity of the apostolic succession. They looked to the countries beyond the sea as the perennial and untainted source of the waters of spirituality and accepted the lead of the foreign priests without making any careful investigation into their credentials.

The following extract from Buchanan's "Christian Researches in Asia" conveys the point of view of the Indian Christians.

"'These churches,' said the Portuguese, 'belong to the Pope.' 'Who is the Pope?' said the natives. 'We never heard of him.' European priests were yet more alarmed when they found that these Hindu Christians maintained the order and discipline of a regular church under episcopal jurisdiction; and that for 1,300 years past they had enjoyed a succession of bishops appointed by the Patriarch of Antioch. 'We,' said they, 'are of the true faith, whatever you from the West may be, for we come from the place where the followers of Christ were first called Christians'.'

The Portuguese missionaries did not confine their attention to the conversion of the Hindus. Bernardine Ferrary and Peter Luiz preached among Portuguese attempts to convert the Syrian Christians with the object of Syrians. turning them to the Roman Church. * Melchior Carnerio made untiring effort to convert the Syrians to the Roman creed in the course of his itimary into the interior. When the power of the Portuguese became sufficient for their purpose, they invaded these tranquil churches, seized some of the clergy, and subjected them to the death of heretics. "There the inhabitants heard for the first time that there was a place called Inquisition; and that its fire had been lately lighted at Goa." They had none of the practices which had their origin in the compromise's between philosophical disputations and political concessions which modified the growth of Christianity in the west. "The Indian Church stood," says Hough, "if not so erect in truth and righteousness as we would frain desire, yet as one of the most interesting monuments of ecclesiastical antiquity, and a lasting rebuke of the papal pretension to the Universal dominion in the Christian world." To the Portuguese, conversion was the handmaid of political supremacy and the whole forces of the counter-reformation were rendered available to the Roman Pontiff who blessed the project of bringing the countries of the east under his spiritual sway. The religious orders of the Franciscans, Cistercians, and Dominicans were under his command. The Society of Jesus founded by Ignatius Lovola in 1540 A. D. did for the papacy what armies and fleets failed to do. Its

^{*} Some say that the attempt was only to convert to the Latin-rite as the church was already Roman.

emissaries were armed with intelligence, knowledge of every conceivable subject, and an exceptional proficiency in the arts of diplomacy. To these qualities were added the spirit and practice of extraordinary discipline.

To India came one of the earliest and ablest of the Jesuits, Francis Xavier, who devoted to the cause the St. Francis Xavier. highest talents and the utmost energies. Blessed by the Pope and encouraged by the king of Portugal with the highest honours, Xavier started for the east. The soldier of God reached Goa in a ship which furrowed the heavy seas for full thirteen months with its charge of one thousand passengers. Xavier learned and taught and prayed with the most genuine devotion for the success of his efforts.

His labours in Malabar were crowned with success... Ten years before his arrival a deputation of seventy men from the Fishery coast complained to the Portuguese uthorities at Cochin against the oppression of the Muhammadans and requested their assistance, promising to become Christians. They were baptised then and there. This opened a good prospect and Fr. Miguel Vaz who was sent to the place succeeded in baptising twenty thousand persons, the population of thirty villages, in fifteen months. It was these new converts whom Francis Xavier was commissioned to look after. After working for sometime in the Tuticorin coast converting a large number, he proceeded to Travancore where he commenced his operations under permission of the ruler. There were already a few churches in existence such as the one at Valiathura. Xavier's method was simple. He did not wait for the erection of costly chapels and commodious churches. "Wherever he made converts he erected first a Cross and then a booth of branches and palm leaves which was in time replaced by a church built of stone and cement". He writes that in one month he was able to convert "ten

thousand persons and that frequently in one day he baptised a well-peopled village". This statement may not be literally true, but the achievement was such as to justify a complascent attitude of mind. The community to which the proselytes belonged, being poor and unorganised, entertained feelings of love and respect for him who promised them the good things of this world and the next. Xavier fixed his headquarters at Kōṭṭār where a church was built. He soon became a prominent figure.

Xavier was one of the earliest missionaries from Europe who understood the importance of securing the friendship and co-operation of the Syrian Christian community. He wrote to Ignatius Loyola requesting him "to send a powerful Jesuit preacher to perambulate the sixty villages of the Syrian churches". Becoming weary of work and depressed in mind because of his failure to convert as large numbers as he desired, he left for Japan where he hoped to win greater victories. He died in the course of the voyage off the Chinese coast.

In 1546 the Portuguese established in Cranganore a Franciscan college by the order of the Archbishop of Goa and under the patronage of the king of Training in Spain. The object was to educate the Cranganore college. young men of the Syrian Christian Community in the classical Latin language and give them an acquaintance with the rites of Latin Christianity. Vincent de Lagos, upon whom Francis Xavier lavished high praise in his letters to the king of Portugal and to Ignatius Lovola, laboured in that college for many years, preaching among the Syrians until the moment of his death. The Portuguese authorities spared no pains to enlist in the service of the Roman Church the intelligence the Syrian and the influence of students Seminary who were "descended from those whom St. Thomas made Christians". These young men were not

slow to reap the secular benefits of that education and imitate Romish methods in dress and etiquette. But the Syrians refused to admit the newly trained men into their churches or permit any innovation in the forms of worship. They continued to get instruction from the Patriarch of Babylon and perhaps from Antioch.

In 1549 Mar Jacob, the Syrian bishop, died and six years passed by before another bishop arrived. In 1551 dissensions broke out in the eastern patriarchate. The death of Simon Mamma, the Patriarch, gave rise to a dispute with regard to succession. The party in favour of union with Rome secured the consecration of a monk named Simon John Sulacca by the Pope, while the other party got their nominee also raised to the patriarchate. "From this date there has been a division and two district lines of succession of Patriarchs of the East, the Chaldean Patriarchs holding the Catholic Faith and in union with Rome, and the Nestorian Patriarchs not in communion with Rome and adhering to the Nestorian heresy".*

In 1557 the Pope raised Cochin to the status of a bishopric for the Latin Catholics of Malabar. All the Roman Catholic churches in Cochin, Tra
Proselytism vancore, the Carnatic and Ceylon were placed under the Bishop of Cochin. The priests "directed their exclusive attention not to the evangelisation of the masses of the non-Christian population of the country, but to the conversion of the Syrian Christians in particular whom they were determined to redeem from their Nestorian beliefs and from the influence of foreign Prelates from Antioch and Babylon". The missionaries performed their evangelistic activity only after securing the permission of local rulers to pursue the work in their

[•] The Travancore State Manual, Nagam Aiya, Vol. 11, p. 161.

respective territories, a permission which was ungrudgingly granted. Some of the students of the Cranganore Seminary were ordained according to the Latin rite by the Bishop of Cochin. These priests tried to 'latinize' the Syrian bishop Mar Jacob. It was contended that whatever was not Latin was heretical. They did succeed in latinizing some of the clergy; but all of them were looked upon with undisguised disapproval by the bulk of Syrian Christians.

After Goa became a Metropolitan see with Cochin as suffragan see in 1558, the Portuguese desired very much that the Bishop of Goa should have jurisdiction in Malabar. About this time the Chaldean Patriarch Ebedjesus obtained from the Pope confirmation of his own jurisdiction over Malabar. But in the council of Trent the delegate of Portugal vindicated the right of the Goan jurisdiction as against that of the Chaldean Patriarch.*

The attempts of the missionaries to bring under their control the Syrians who were under the jurisdiction of

Tactics of the Portuguese.

the Bishop of Angamale proved futile. The bishop scrupulously maintained and openly asserted his independent rank as the Metro-

politan of India. The Portuguese tried to interpose the weight of their temporal authority. They intercepted communications between the Syrian Metropolitan and the Patriarch of Antioch and kidnapped and otherwise disposed of prelates consecrated by the Patriarch to guide the churches in Malabar. A formal order was also promulgated that, should any foreign prelate enter Malabar he would be punished with death. Mar Joseph was appointed by the Chaldean Patriarch Mar Ebedjesus and deputed to Malabar. But he was arrested and sent to Lisbon by the Portuguese, on a charge of violating his pledge to Rome by insisting on the performance of oriental rites. In the

^{*} Christianity in Travancore, Mackenzie, p. 17.

meantime, according to some historians the Nestorian Patriarch Simeon VI appointed Mar Abraham to Malabar*.

Mar Joseph, however, managed to return to Malabar armed with letters of commendation from the Queen of

Disputes among bishops.

Portugal. Mar Abraham was now arrested by the Portuguese at the instigation of Mar Joseph, but he managed to make his escape,

obtained reconsecration as bishop by the Patriarch, proceeded to Rome, secured confirmation of his appointment at the hands of the Pope, and returned to Malabar as Archbishop of Angamale. He made a formal submission to Rome to elude the indignant watchfulness of the Portuguese civil authorities. Before his arrival Mar Joseph had been arrested and sent to Rome for punishment. But Mar Abraham was not without further troubles. He was again seized detained in custody. But the prelate managed to effect his freedom and place himself at the head of his flock. He then began to preach his old Nestorian doctrines.† Hearing of these developments the Pope ordered a council to meet at Goa in 1575 and directed Mar Abraham to appear in person. Fear of the Portuguese "who were over his head as an hammer over an anvil" persuaded him to enter appearance. With a remarkable agility of conviction he again swore unquestioning allegiance to the Pope. He invited the Jesuits to work in his diocese. They recommended him to the Pope and obtained indulgences for a church which he had built. Mar Abraham proposed Archdeacon George to the Pope and secured for him the bishopric of Palayūr. George was to administer the see of Angamale in the absence of Mar Abraham.

But no sooner did the latter find himself among the Syrian Christians than he again cast away the confession of

[•] There is difference of opinion on this point.

[†] This is the Portuguese version. The Romo-Syrians hold the contrary.

faith to the winds.* Anxious to maintain an uninterrupted succession of priests consecrated by the Patriarch, he applied to Babylon for a co-adjutor. The Patriarch sent Mar Simeon in 1578.† The people venerated him. But the two priests soon fell out and Mar Abraham contrived to get Mar Simeon arrested and sent to Portugal. Before he left Malabar, Simeon appointed one Jacob as Vicar General to officiate until he should be able to return, which he never did, as he was consigned to the care of the Inquisition. Mar Jacob continued to teach Nestorian doctrines among the St. Thomas Christians for twelve years. The details of the fate which awaited Simeon have not been correctly ascertained. The following observations of Mr. Cheriyan are interesting. "Among the many deplorable steps taken by the Portuguese for bringing about a union between the Malabar Syrians and the Church of Rome, one of the saddest is the very harsh treatment awarded to the local bishops by the Portuguese and the fraud and dissimulation practised by these bishops. sometimes with a view to save themselves, but more often to gain an undue advantage over a rival bishop. These bishops were Mar Joseph, Mar Abraham and Mar Simeon. None of them seems to have been at heart a Roman, but every one of them abjured his faith not only from motives of fear, but also with a view to secure a victory over his rival with the aid of the Portuguese. They were dragged out of their country, one of them twice, and, to use the language of Geddes, tumbled about the whole world. One of them died in Lisbon and another in Rome. One of them

The Romo-Syrians do not accept this account. They attribute it to Gouvea. Mackenzie does not say what Gouvea's motive was. The version is repeated by writers like Geddes, Hough & Day.

[†] Mackenzie says that the best authorities are of opinion that Mar Simeon was sent by the Nestorian Patriarch to oppose Mar Abraham because Mar Abraham had gone over to the Chaldean party and had been reconciled to them.

had to experience a shipwreck. Two of them escaped from places where the Portuguese had kept them in custody. Of the whole miserable trio, it must be said that, whatever they suffered, we cannot vindicate their conduct." *

Mar Abraham strained every nerve to strengthen the Syrian Church. The Archbishop of Goa again summoned him to council, but profiting by the example of his rivals and his own experience on the previous occasion the astute bishop declined the invitation. By this time the Jesuits had come and settled down througout Malabar converting many to their faith. In 1574 Alexander Valignano arrived with his priests and obtained permission from the lajas of Cochin and Porakkad as well as from Mar Abraham to carry on propaganda work. In 1581 they opened a college, built a church and set up a printing press at Vaipicotta. Father Valignano was appointed Provincial of the Jesuits in Malabar and he at once began a systematic instruction of the Syrian Christians. With the approval of Mar Abraham the Jesuit fathers preached and catechised throughout his diocese.

appointment of Menezes as Archbishop of Goa led to violent efforts and violent changes. Menezes was determined to stamp out the very Archbishop roots of the idea of independence of Menezes. Rome wherever seen to exist. it was Writing to Rome in 1597 he emphasised the necessity of selecting a competent Jesuit father for spiritual instruction in Malabar. He wrote:-"I humbly suggest that he be instructed to extinguish little by little the Syriac language which is not natural. His priests should learn the Latin language, because the Syriac language is the channel through which all that heresy flows. A good administrator ought to replace Syriac by Latin. What is most important

^{*} The Malabar Syrians and the Church Missionary Society: P. Cheriyan, p. 47.

of all is that the bishop be a suffragan of this city, as is at present the bishop of Cochin, his nearest neighbour". The Pope entrusted Menezes with a brief empowering him to enquire into the life, conduct and doctrine of Mar Abraham. This was followed by another which gave him power to appoint a Vicar-Apostolic to administer the diocese after the death of Mar Abraham. Before the Archbishop had taken any action, he received the intelligence that the aged Mar Abraham had applied to the patriarch to send a successor. Menezes at once obtained orders to have all the ports watched. The precaution was successful. A bishop and a priest on their way to Malabar were stopped at Ormuz and sent back to their own country. Soon after Mar Abraham died* entrusting the church to Archdeacon George, his co-adjutor. About the same time Jacob, the Nestorian Vicar-general of Mar Simeon, also died.

. In pursuance of the authority vested in him by the Pope, Menezes appointed a Jesuit, Francisco Roz, the rector of the Vaipicotta Seminary, to the vacancy Archdeacon George. caused by the death of Mar Abraham. But subsequently, on hearing the views of the Council of Goa, the appointment was withheld and the Syrian Archdeacon was raised to that place. George considered that the administration of the vacant see fell on him as a matter of right. He openly declared that the appointment by Menezes gave him only what he already held. He also started an agitation against the Latin influence in the church. The students and priests of the Vaipicotta Seminary who followed the Latin rite were admission into the Syrian churches. He and his followers would not tolerate interference any further. So they met

^{*} Some writers say that Mar Abraham abjured the Nestorian faith before his death, while others maintain that he died a Nestorian refusing admission to Jesuit fathers to his death bed.

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in large numbers at Angamale and swore that they would stand with the Archdeacon. While temporizing with the archbishop, demanding a Franciscan friar for their spiritual guidance, they took a decided step by expelling the Jesuits from their churches.

Menezes and the Jesuit fathers held the idea that the use of Latin rite would preserve the Syrians from danger of lapsing into Nestorianism. They Menezes and the regarded the efforts of Archdeacon George Archdeacon. as a prelude to heresy. Menezes therefore visited Malabar to settle the disputes. He moved from place to place to subdue the opposition of the Syrian Christians to the acceptance of the Catholic faith as understood by him. Large assemblies were convened and the advantage of the membership of the Catholic Church and communion with. the Holy See on the one hand and the evils of schism and participation in the 'Nestorian heresy' on the other explained in all their aspects. But Menezes was reckoning without the host. The Archdeacon refused to comply with the demand. His party was equally determined to resist the proposal. A meeting was, however, arranged at Kanjur between the Archdeacon and the Archbishop. But nothing of a definite character was settled. Menezes who had already secured a promise from the Kaja of Cochin to support him with a large body of soldiery passed an order of ex-communication against Archdeacon George. He was condemned as an enemy not only to the Pope but also to the ruling princes of Malabar. The terrors of ex-communication removed all resistance of the recalcitrant Syrians. The Archdeacon presented himself before Menezes in all humbleness, "knelt down before the Crucifix, swore on the missal, and set his hand to a deed of ten articles framed by Menezes, promising at the same time to abjure the Nestorian heresy, to acknowledge the Pope and the confession of Pious IV, to curse the Patriarch, to deliver up all the books

in the diocese either to be amended or burnt". "The Archbishop performed the ceremonies in his pontifical robes with much solemnity, which was seen by all the people, and he gave Holy Orders to many, a thing which had never happened in time past......" All swore to the faith and swore obedience to the Roman Church, as others had done, so that from this time the party of the Archbishop increased and acquired more strength in the Christian community. Emboldened by all that he saw in the course of his triumphal progress through the diocese the Archbishop resolved to summon a diocesan Synod at Udayamperūr, known in history as the Synod of Diamper.

Eleven days before the date appointed for the meeting the Archbishop arrived at Diamper attended by six Jesuits and his Confessor and 155 kathanars with The Synod of their laymen and the Archdeacon. Diamper. presence of the Portuguese governor of Cochin and the representatives of the ruling princes bespoke the influence of Menezes over the temporal authorities. The draft decrees were discussed and passed by the select committee. On the appointed day, June 20th 1599. the synod was opened with great solemnity. The various clauses of the decrees were adopted by the assembly without any public disturbance but there was considerable dissatisfaction. Many complained of the violent manner in which they were being separated from the Patriarch of Babylon. But assurances given in the name of God reduced the strength of the opposition if they did not dissipate the apprehensions of those who held fast to the forms of the ancient Syrian Church. Menezes would fain have ruled out the Syriac language itself but was obliged to tolerate its continuance in the interests of peace. The decrees having been passed the Archbishop rose up, and having taken off his mitre knelt before the high altar, and began the Te Deum which was sung throughout the course of a solemn procession.

round the church. The books, documents, manuscripts and regulations regarding ecclesiastical matters were consigned to the flames. "In this service", says Hough, "those of the Roman communion sang in Latin, the Kathanars in Syriac and the Syrian laity in Malayalam." Towards the close of the synod a letter was received from the Bishop of Cochin congratulating the Syrians upon their emancipation from the Chaldeans and their submission to the Roman Church. The object of the epistle was to confirm all that was said respecting the supremacy of Rome and to enhance the confidence of the people in the Archbishop. The Archbishop realised his heart's desire of getting the Syrians to abjure their former faith and their allegiance to the Patriarch of Babylon under the authority of the Pope.

The proceedings of the Synod of Diamper received the praises of His Holiness. The Roman Church appreciated the changes effected in the Christian faith and forms in Malabar, which, it was understood, was due to the exertions of Menezes. The Pope congratulated the Archbishop and the entire body of Christians converted by St. Thomas in Malabar not only for correcting errors and rejecting, anathematising and condemning the errors of the impious Nestorians but "also for acknowledging and professing the Roman Pontiff as the common father of the whole Church......"

The decrees passed by the Synod of Diamper were not Criticism of the without their drawbacks. Among those decrees. condemned by informed opinion were the mistakes in the following particulars.

- 1. In thinking that the passages wanting in the Syrian bible had been wilfully omitted, whereas scholars afterwards saw that these gaps agree to the gaps in some old manuscripts in Europe.
 - 2. In the matter and form of holy orders. •

- 3. In mistaking the formula of baptism a proclamation that the child was baptised.
- 4. In saying that holy oils were not used and that confirmation was unknown.
- 5. In saying that masses for the dead are unknown.
 - 6. In forbidding the eating of beef on Saturday.
- 7. In making unnecessary changes in the Syrian liturgy.

Asseman observes that before the Synod of Diamper the St. Thomas Christians knew nothing of auricular confession or extreme unction, that matrimony was not considered to be a sacrament, that they denied the presence of Christ in the Eucharist, that they were unwilling to reverence the images in the Portuguese churches, and that they impugned the supreme power of the Roman Pontiff and some of the traditions of the Roman church. He, however, asserts that these were errors which had crept into the faith and practice of the Malabar Church through the sloth or ignorance of their teachers; for the Nestorians in Syria accepted all Roman doctrines, even the primacy of the Roman Pontiff and went astray only upon the Nestorian heresy. "The work of Menezes did more to promote the spiritual welfare of the St. Thomas Christians than had been done by the occupants of that see from the Apostle's time to this". wrote Fr. Nicholas Piementa in 1599 from Goa to the General of the Society of the Jesus.

Hearing of the existence of tribes living on the mountains Merces sent two Syrian priests, who came upon a colony of Thomas Christians at the foot of the hills and also baptised some men of the hill tribes. The twenty-second decree of the third session of the Synod of Diamper placed the Angamale diocese under the jurisdiction of the Inquisition at Goa.* It would

^{*} Travancore State Manual, Vol. II, Nagam Aiyah, p. 178.

appear that this was done in order to confer upon some priests of the Angamāle diocese powers to give absolution in heinous reserved cases without reference to Goa or to Rome, a reference which was found to be tedious. The main objects of the reforms were to set right the liturgy in conformity with Romish doctrines, to enforce discipline among the local clergy and bring about a change of attitude among the Christians of Malabar to look to the see of Rome as the centre and source of Christian authority. Nor were advantages of temporal power less appreciated by the ambitious Archbishop. He enlisted the support of the rajas of Cochin and Porakkād by obtaining for them from the Pope the title of "Brother in Arms".

The Christians of the Roman persuasion in Malabar showed their admiration and respect for Menezes by electing him as the Archbishop of Angamale, a Archbishop Roz. place which he was quite willing to accept as he desired to spend the rest of his life among the members of the St. Thomas Church. But as his services at Goa were deemed indispensable, the authorities at Rome refused to accept his resignation of the See of Goa or ratify the election. As it was considered impolitic to entrust the diocese to an Indian bishop, the Pope removed the diocese of Angamale from the jurisdiction of the Chaldean Patriarchate and made it suffragan to Goa. The king of Portugal offering to pay an endowment to the see, the Pope by a Bull of August 4, 1600 granted the patronage to that king who appointed to the vacant bishopric Fr. Francis Roz, S. J. A few years later in 1608 the see was again declared an archbishopric and placed under the authority of Cranganore in 1609. Roz was made archbishop. He followed the policy of latinizing the Syrians. He paid regular visits to the various places in the diocese and strove to implement the Diamper decrees. He supplemented the offices of the Syriac missal with the translation of the Roman missals for Ash

Wednesday and Holy Week. For sometime the relationship between Roz and his flock was cordial, though the latter was always inclined to prefer a local man to an alien. The powers of the Archdeacon were reduced and there was discontent everywhere. In 1618 Roz named the European rector of Vaipicōṭṭa, Stephen Britto, to administer the affairs of the diocese during his absence at Goa. This was considered a serious usurpation of power contrary to the usage of centuries. Spiritual communion with Rome might have its advantages, but when the hand was stretched out to grasp the temporal power, the Syrian Christians began to assert themselves in defence of their ancient rights and privileges.

The animosity smouldered through several decades. Feelings ran so high that in 1620 Archdeacon George and his followers broke communion with Rivalries the Archbishop and endeavoured by every means in their power to put a stop to foreign supremacy. Through the efforts of Stephen de Britto who was co-adjutor to the Archbishop a peace was concluded and the Archdeacon was made administrator of the diocese. This made for a superficial amity for some time. Archbishop Roz died in 1624 and was succeeded by Stephen de Britto, who to all outward appearance worked amicably with the Archdeacon. But George was never weary of attempting to defy the influence of the Jesuits and the authority of prelates appointed from Rome. The Archdeacon made repeated complaints to the papal envoy saying that for four decades the Jesuits were making unlawful use of their influence and striving to preserve their authority intact by excluding from Malabar the members of all the other churches. He demanded that no more Jesuits be sent and suggested the grant of permission to other orders to promote conversion-a work which was grossly neglected by the Jesuits. As the quarrel of the Syrians was chiefly with the Jesuits.

a Dominican, Father Donato was appointed co-adjutor to the Jesuit Archbishop. Other religious orders were also allowed in the diocese.

In 1637 Archdeacon George died and his nephew Thomas, known also as Thomas de Campo, succeeded to the office according to established custom. Four years later Stephen Britto died and Thomas de Campo. Garcia who was the principal of the Jesuit college at Kaduthuruthi was appointed to succeed him. The patriotic party made repeated requests "to the Nestorian Patriarch of Babylon, to the Jacobite Patriarch of Antioch and to the Coptic Patriarch of Egypt, asking each of them for a Bishop to the St. Thomas Christians". They could not think of approaching the Chaldean Patriarch who must have permission from Rome for any interference. Hough explains this conduct of the Malabar Christians by suggesting that they were too little acquainted with the tenets of the respective churches to discriminate between them. The Syrians it would appear desired to retain the primitive order of their church. At that time all eastern churches were sufficiently uniform in their policy.

In 1652 there came to Malabar a bishop sent by the Patriarch of Antioch * who was named differently in different languages. He was Ahatalla in Syriac, Theodore in Greek and Adeodatus in Latin. The Jesuits, managed to place him under restraint. After many disconsolating adventures, including a period of virtual incarceration, he was obliged to leave the country notwithstanding his impassioned appeal to his prospective flock and the veneration which attached to his

^{*} Augur in his Church History of Travancore says that it was the Patriarch of Egypt who sent Ahatalla. Mackenzie and Cheriyan favour the appointment by the Patriarch of Antioch. That appears to be supported by the trend of Hough's argument and the tradition current in Malabar.

name in the estimation of the Malabar Christians. Great was the dispute between the Archbishop Garcia who dubbed him an imposter and the Syrian Christians who were anxious to recognise the appointment made by the Patriarch whose authority they preferred to that of the Pope. The Jesuits seized Ahatalla at Mylapore where he was sojourning and took him to Goa in order that he might be sent to Lisbon and thence to Rome (for condign punishment). The ship with Ahatalla on board touched at Cochin. The Syrian Christians demanded his liberation. But the Portuguese authorities took a defiant attitude and refused compliance. A mystery shrouds the fate of the unfortunate prelate. Some reports say that he was taken to Goa where he was doomed by the Inquisition, while others maintain that he was thrown into the sea.

The Syrian Christians were indignant towards the Portuguese for intercepting their bishop on his journey to his allotted diocese. They assembled in Thomas elected large numbers at Mattanchēry, discussed Episcopa. the situation, passed a resolution denouncing the Portuguese Jesuits and the Pope and elected Archdeacon Thomas as their Episcopa. They again met and renewed their oath in front of Koonen Cross (1653), disclaimed all friendliness with the Jesuits and renounced once again the authority of Rome, though a section of the people was for maintaining the connection. The Portuguese captain complained to the ruler of Cochin about the attitude taken by the Syrians but the request for help met with no response. In the meanwhile, two further meetings were held one at Edapalli and the other at Mangate (Alangad) in which latter place Archdeacon Thomas was consecrated as an archbishop by twelve Syrian kathanars. Refusing to pay allegiance to Garcia the Syrian Christians worshipped under their own archdeacon. The revolt against Jesuit supremacy was now complete. Of about two hundred

thousand Syrians only four hundred remained under the rule of Garcia. Attributing these results to the conduct of the Jesuits, and anxious to preserve the authority of the Roman see, Pope Alexander VII sent a tody of Carmelite monks to supersede the Jesuits in Malabar. Garcia and his party also sent requisitions for help to the Carmelites.

The first batch of Carmelites arrived in February They received the support of the Portuguese Government as the Jesuits had done before. Legality grand meeting at Koravalangad under their questioned. auspices produced a great impression which emboldened the Carmelite, Vincent Maria, to proceed from there to Kaduthuruthi and thence to Mangate. The Archdeacon's party was still strong and an incident which occurred alienated the sympathy of the Syrians. One of the Syrians whom the Archdeacon admitted to holy orders was killed by the soldiers in a quarrel. Many considered the consecration of the Archdeacon to be an irregular proceeding, as the imposition of hands by the kathanars was in conflict with established precedent. No bishop or other high dignitary would be fit to perform his function unless he was tried, examined and admitted to the office in the rightful manner. The underlying idea was that no one could be a lawful minister "without a commission derived from the occupant of the Apostolic See". The Pope as well as the eastern patriarchs represented the Apostolic power through a continuity of succession. Consecration by the presbyters was therefore unauthorised and uncanonical. Thus many were the people who were predisposed to pay respect to a bishop ordained by a proper prescribed authority whether Antioch, Babylon or Rome. Some of the Syrians under the leadership of Parampil Chandy, a relation of Archdeacon Thomas, were willing to submit to any bishon except a Jesuit.

The Carmelites would have succeeded in the effort had it not been for the Archdeacon who would never give up his episcopal office or consent to place Position of Carmehis church exposed to the tender mercies lites weakened. of foreign prelates. The majority of the Christians interested themselves in maintaining the distinctiveness of what they believed to be the doctrines of Christianity expounded by St. Thomas. The collision between the rival orders, the Jesuits and the Carmelites, considerably weakened the cause of Rome and strengthened that of the Archdeacon, who, with the assistance of his confidante Itti Thomas Kathanar, turned the situation to his own advantage. Wearied with the resistance of the Syrian Christians on the one hand and the vexatious intrigues of the Jesuits on the other, the Carmelites saw very little prospect of success and began to entertain serious thoughts of abandoning their mission. In a conference which was convened the logic and eloquence of the Archdeacon's declamation appealed to the people. Said he: "What need have we of the Portuguese who have governed ourselves during so many ages? The union effected by Don Alexis de Menezes was obtained, as you well know, by force rather than consent. Why submit again to a yoke we have so happily thrown off? What privileges does the Latin Church possess greater than our own, which is much the more ancient? The other eastern churches do not depend upon her; and shall we be the only people to submit to her domination? They assert that mere priests cannot elect and consecrate a bishop; why then do the Cardinals of Rome act in a similar manner? For do they not elect the Pope and invest him with an authority superior to their own? The form of government which we follow is canonical, and we received it from our Holy Apostle. If you are not satisfied with the present state of things, let us write to Babylon for Syrian prelates of our own rite and religion."

Itti Thomas Kathanar told the Carmelites that since the Archdeacon was chosen bishop of the diocese by the unanimous voice of the church, and had been recognised as such by all the princes on the coast, they must first acknowledge him in that capacity. They were warned that until that point was conceded they need not expect anything. The Carmelites were equally strong and maintained that the Archdeacon would not be consecrated until he deposed himself and testified by his humiliation that he repented of the fault he had committed in assuming the episcopal dignity.

The Archdeacon treated the Carmelites with contempt. But they were received well at Kaduthuruthi, Kora-

Obstinacy of the Carmelites.

valangad and a few other places. The southern parishes were generally firm in their attachment with the Roman party.

The Archdeacon sent round a circular warning the people against the newcomers, saying that they were Jesuits in disguise, charged with false briefs fabricated at Goa. and had come to Malabar to subject them all again to the foreign yoke. The letter was read in all the churches. The argument was so effective that the people veered round the Archdeacon's cause. The Carmelites continued to insist on the Archdeacon's abdication pending the decision They resolved to make yet another attempt by the Pope. to secure the northern churches. The Carmelite Vincent proceeded to Cochin to bring round the Christians of the northern division. But the rivalry of the Jesuits complicated the situation. A meeting which was convened did not take place for want of attendance. The Carmelites retired in sullenness and again made proposals to the Archdeacon for an interview. He asked them to treat with But the Carmelites insisted on the public deposition of the Archdeacon before anything could be done.

"Under the mask of zeal for religion", said the Archdeacon, "they only wish to despoil me of this dignity in order to make me the sport of the Portuguese and the scorn of the heathen. But I shall not be miserable alone; you also will fall again under the yoke. The church cannot subsist long without a head; how will you be able to maintain yourselves".* The Syrians resolved to stand by him to the last. Again and again was the question of reunion mooted. But the assemblies which were convened recorded their verdict in favour of the Archdeacon and definitely against the Carmelites.

The Archdeacon's desire for consecration was. however, regarded as a tacit admission of the invalidity of his position. The party of Alexander A crisis. de Campo, the friend of the Carmelites, was not slow to use the argument for their own purposes. The name of Rome exerted in several places a potent influence. The kathanars entreated the Carmelites to visit the various churches and bestow grace upon the members. They came and were led in grand processions. The response would have been much greater had the Syrians been enabled to make their submission to Rome without forsaking the Archdeacon. But the missionaries again declined to allow him to retain his office and his dignity. Archdeacon's followers were firmly devoted to him. "The Archdeacon", said they, "is our natural head; we cannot therefore consent to lose him. Without him our religion would be very imperfect, and endless divisions would rise up against us. Indeed we are preserved only by the credit of the Archdeacon and are therefore bound to maintain him." The feeling was so general that the proposals made by the Carmelites in public meetings were all turned down. About this time Joseph the Carmelite who had gone to

^{*} The History of Christianity in India, Vol. II, James Hough, p. 835.

[†] Parampil Chandy.

Rome to acquaint the Pope with the situation returned to Malabar consecrated as bishop in 1659 A. D. He was also made Commissary Apostolic with power to consecrate two other bishops and appoint them as Vicars-Apostolic. Garcia was now dead.

The rivalry which arose between Joseph and the Archdeacon soon led to a crisis. Thomas wrote to the Carmelites to say that they should recognise his authority. But it was nothing more than a blind. The properties of the refractory churches were confiscated. Conferences frequently broke up in tumult and confusion. Prince Gōda Varma of Cochin stationed a force of one hundred Nāyars around the church where the Archdeacon resided. Bishop Joseph "hunted his rival as a partridge in the mountains". But the Archdeacon managed to escape. His effects, however, were seized and his books, the consecrated oil and his palanquin were publicly burnt. This was a sore disappointment and the cause of despair to the patriotic party.

The Christians of Kandanad, Mulanthuruthi and a few other places met at Diamper, "solemnly abjured their pretended schism and submitted themselves to the (Roman) bishop. This abjuration was made in the church in the presence of the Portuguese general and the Prince of Cochin." Eighty four churches entered the Roman communion, while thirty two alone remained steadfast to the Archdeacon. The former called themselves Palayakūttukār (Old-party), while the latter came to be known as Puthenkuttukar (New Party). "The old party otherwise known as the 'Syro Romans' or Romo Syrians preferred to continue under the Romish bishops, retaining their services in the Syriac language and part of the Syriac ritual, but acknowledging the Pope and his Vicars-Apostolic. They are generally known as 'Catholics of the Syrian Rite' to distinguish them from converts to the Latin Church......". The Puthenkur Syrians on the other hand assiduously

maintained the doctrines and rituals of their ancient church and faithfully submitted to the rule of their own metrans connected with the Patriarch of Babylon and of Antioch.

By this time the Dutch had arrived in Malabar.

Position of the Church. The position of the Malabar Christians is thus described by Francis Day:—

"The Syrians had at last partially thrown off that allegiance to Rome which had been obtained from them through conviction, bribery, fraud, or violence. The Jesuits had removed their ancient Bishopric of Angamāle into the Cranganore fort, where the head of their sect was Archbishop; but their violence had rendered them abhorred, and their frauds had caused them to be detested; they were now proscribed, but obtained an asylum in the Cochin State.

"The barefooted Carmelites had been sent by the Propaganda, to attempt to stem the rising storm; to alter the hatred against Priests to affection for them; and by kindness and conciliation to the wants of all, to endeavour to refasten the links of that Romish chain that the violence of the Jesuits had snapped asunder. The Carmelites were commencing to be favourably received, when the Dutch arrived; at this period the Carmelite bishop partly ruled the Malabar Church, whilst the Syrian bishop was a Negro unfavourably viewed by all and, in fact, a fugitive from his own churches, his party were known as the New Christians, and lived mostly in the more hilly portions of the country. The Romish Church was divided into two, the Portuguese and the Italian Carmelites, who although hostile to one another, both compelled their communicants to follow the liturgies of Rome, and obey her doctrines without reserve. There was likewise a sub-division of them, or the Romo Syrians, who differed in some minor points from the Roman Catholics, being permitted to employ the Syriac language in their churches, and continue some of the

Syriac rites, and their Priests were dressed in white, instead of always in black." *

The change in the political conditions added one more cause of disturbance. In 1663 the Dutch captured Quilon and Cochin and all Catholic ecclesiastics The Dutch expelled the Jesuits of European birth were ordered to quit imand Carmelites. mediately. The Jesuits and the Carmelites were equally under the ban. Bishop Joseph had the resourcefulness to safeguard the interests of his church by consecrating Alexander de Campo (Parampil Chandy) as Bishop of Megara in Goa and Vicar-Apostolic of the Archbishopric of Malabar in 1663, and placing him in charge of the flock before he left Malabar. Of this consecration Mackenzie observes: "In the ceremony two Portuguese priests took the part of the assistant bishops. This is an interesting point for rubricists. At a consecration it is customary that three bishops be present, one as consecrator and two as assistants, and it is a moot point in discussions among theologians whether the presence of the two assistant bishopst is necessary for the validity of a consecration. ...In the Salamanca course of moral theology the instance of Bishop Chandy's consecration is the leading case on the point and it is held that the procedure of Bishop Joseph was justified by the urgency of the occasion. But Bishop Joseph acted in accordance with the words of the Brief of the 24th December 1659." ‡

The Dutch were engrossed in their own affairs, commercial and political. Self-interest, however, induced them not merely to take possession of the Latin churches in Cochin but also to exact a promise from the clergy that they would on no account pay

[★] The Land of the Perumals, Francis Day, pp. 239—40.

⁺ In this case neither of the two assistants was a bishop.

Travancore State Manuel, Vol. II, Nagam Aiya, p. 187.

allegiance to Portugal. On the dispossession of the churches in Cochin such Christians as resided there were obliged to go to Vaipin for worship. Bishop Chandy soon managed to get into friendly relations with the Dutch, as his residence in Cochin gave him opportunity for friendly intercourse. He did not, however, succeed in pushing himself into their favour. But Archdeacon Thomas was, on the other hand, in a distinctly unfavourable position; for, he was in the interior where his headquarters had been fixed. On the whole, the Dutch appear to have disliked him. But within a short time the de facto authority of Thomas was destined to become a de jure one. The Syrians were persistently keeping correspondence with the Patriarch of Antioch and sending frequent messengers to press their request. The Patriarch would be doing his Christian duty if he helped them by sending a bishop. At the same time it would prevent the See of Rome from extending still further. The priest selected was Gregory who possessed sacerdotal antecedents. He was for some time occupying the patriarchal chair at Jerusalem. Intending to strengthen his own position and establish the authority of Antioch by the willing allegiance of the flock, Gregory lost no time in consecrating Archdeacon Thomas as a full-blown bishop. This was in 1665. The Archdeacon came hence-forth to be known as Mar Thomas L.

The Carmelites continued their work with vigour among the Syrian Christians under Bishop Chandy. The Dutch were convinced that their presence allowed to return, would not hinder their political power. So they cancelled the prohibition placed upon the Carmelites. One of their number, Fr. Mattheus, succeeded in ingratiating himself into the favour of the Dutch Governor of Cochin, Van Rheede, by helping him in the compilation of the Hortus Malabaricus — a "ponderous work on Botany". Permission was soon obtained to

build a church at Chattiata. So great was the influence of Mattheus with the governor that Bishop Chandy was persuaded to exempt the new church from his authority. Soon after this another church was built at Varāpuļa on a site granted by the rāja of Cochin. The place thus became the headquarters of the Carmelites.

But fresh difficulties soon arose. Bishop Chandy was getting old. On application being made Van Rheede granted parmission for the appointment

Hereditary succession prevented granted permission for the appointment of a co-adjutor bishop and power was given from Rome to four Carmelite Fathers to make the selection. Chandy supported

the claims of his nephew Mathew with all his influence. But succession in the same family did not find favour with the electors. The precedents were not allowed to solidify into an invariable practice. The Fathers therefore passed over Chandy's candidate and selected a Latin Catholic, Salgrado, a priest of mixed Portuguese and Hindu extraction. He was consecrated co-adjutor bishop at Calicut in 1677. Alexander de Campo had died in 1666. Bishop Salgrado was only acting as Vicar-Apostolic. Thomas de'Castro who was appointed in 1665 was the permanent incumbent. Castro was Vicar-Apostolic in Travancore, Tanjore and other places in the south of India. Mackenzie has expressed the view that he had jurisdiction over the Christians of the Latin rite near Cape Comorin, who were descendants of the converts of St. Francis Xavier. But his sway over Travancore was merely nominal.

The appointment of Salgrado led to friction. In 1692 he excommunicated George, the Syrian priest who was associated with Chandy as Vicar-general. Apprehending that the measure would alienate the Syrian Christians the Pope passed a decree deposing Salgrado from the office of bishop. Custodius De Pinho was nominated Vicar-Apostolic in Malabar, But the authorities at Rome, taking

the view that the Carmelites should be able to do the work better with the co-operation of the people, appointed one of their number, Fr. Peter Paul.

Peter Paul was a nephew of Pope Innocent XII and commanded considerable influence in Europe through the instrumentality of the Emperor Leopald I Jesuits' loss and of Austria. He succeeded in persuading Carmelites' gain. the Dutch Government at Amsterdam to pass a decree (dated the 1st April 1698) permitting a bishop and twelve Carmelite priests, not being Portuguese, to reside within the Dutch territories on the Malabar coast except the town of Cochin. Thus the Carmelite rule definitely began in Malabar with a Vicar-Apostolic appointed under the authority of Propaganda. It was this vicariate-apostolic of Malabar which later on came to be known as the vicariate-apostolic of Varapula. Every newcomer had, however, to submit to the Dutch authorities at Cochin his bull of appointment. Formal permission was required in each case. Though professing the Protestant faith the Dutch had no serious objection to the admission of Catholic subjects. But while they permitted Carmelites belonging to the several nationalities, Italians, Germans or Belgians, they took strong objection to Jesuit priests, who, from the time of the establishment of their order. had been honoured by the confidence and encouraged by the support of the king of Pertugal. It would be injurious, they thought, to allow free play to Jesuit science and diplomacy which were pledged for various reasons to assist the Portuguese by every means in their power. The Dutch disliked the Pope for he was the patron of the Jesuits. When therefore Pedro Pacheco, the newly consecrated bishop, landed at Cochin and sought permission to enter the town on the strength of his nomination by the Pope, he was forbidden to do so and was promptly expelled. The bishop-designate then proceeded to the English settlement at

Anjengo, from where he sought to exert his influence and exercise his authority over the Latin Christians of Malabar. The expulsion of Pacheco is a sad commentary on the change in the fortunes of Portugal. When Menezes came to Malabar, he was received with all honour. Served by the swords and pistols of the Portuguese, he was able to parade the authority of a mitred potentate, the head of the church, the patronising friend of local rulers, and the representative of the imperial sacerdotalism of Rome with all the attributes of unquestionable authority entrenched within the citadel of faith. But in 1699 Pacheco was turned back without being allowed to set foot in Cochin, the rendezvous of the fabled glories of Portugal and of Rome.

Father Peter Paul died in 1700. In 1701 occurred an incident which tends to show that the principle of expediency which got the better of church discipline Novel consecration. in the consecration of Bishop Chandy was followed in the consecration of Fr. Angelus, a Carmelite appointed from Rome as Vicar-Apostolic of Malabar. question of his consecration created considerable difficulty. The selection of candidates for spiritual offices in Malabar required the confirmation of the king of Portugal in whose dominions the churches were situate. As the appointment of Angelus was made independently of Portugal, the Portuguese Archbishop of Goa and the Bishop of Cochin refused to consecrate him. Nothing daunted by these technicalities of law and practice, Angelus Francis found his own remedy. Mar Simeon, the Bishop of Aden who had escaped from his Muhammadan enemies and received ordination as a bishop at the hands of the Patriarch of Antioch, arrived at Surat. He was on his way to Malabar, sent by the Patriarch at the importunate demands of the Syrians.*

^{*} In Anquetil du Perron's Zend Avesta we find that Mar Simeon was a Chaldean bishop attached to the Holy See, who in the Liturgy used unleavened bread. Mackenzie adds 'it appears he used Latin Rite'. See also The Syrian Church of Malabar by Rev. Dr. Placid, p. 50.

Through the intervention of the Franciscan monks he was brought down to Cochin, where he consecrated Angelus Francis. It was argued that the ceremony of consecration performed by him would be in conformity with the Pope's direction. Simeon found it difficult to reconcile the tenets of Rome with those of Antioch and left Malabar for Pondichery, where he lived for nearly twenty years.

Bishop Angelus administered the diocese for a dozen years with his headquarters at Varāpula. The Bishopric of Cranganore, which was under Padroade State of the Cranauthority rendered vacant by the death of ganore Bishopric. Garcia in 1659, was administered by the Carmelites except for a brief interval of five years (1694-1699) during which time Mathew de Campo, nephew of Alexander de Campo, the disappointed candidate in a formal episcopal election, managed the affairs as the Vicar-general of Fr. Diego who was consecrated in Portugal in 1695 but elected to remain there. The disturbed condition of Malabar, the militant attitude of both sections of Christians, and the hostile policy pursued by the Protestant Dutch against the Portuguese and the Jesuits, combined to make the office unattractive. Persons who were nominated found some pretextor other for not coming. Five times did the king of Portugal nominate bishops but not one of them ventured to proceed to India. With a persistence which was characteristic of the papacy, Clement XI appointed a Jesuit father to the episcopal see of Cranganore. This was Ribeiro who unlike many who were nominated before him actually came to Malabar and assumed charge of his duties. Angelus Francis summoned a meeting of the vicars and elders of the churches at Varapula. In that meeting which was well attended Francis removed his cross, mitre and all emblems of priesthood and addressed his hearers saying "from this moment I am not your shepherd. As your legitimate shepherd, the Archbishop of Cranganore, has arrived you must obey him henceforth,"* This means that Angelus himself was not convinced of the lawfulness of his authority. But the Syrian Christians were not pawns to serve the purpose of competing religious orders. They declined the invitation to tender their allegiance to Ribeiro and submitted a memorial to Rome praying that they might be permitted to continue under Angelus himself. They said at the same time that the labours of the Carmelites were so successful that a great many churches were in complete union with Rome. A number of petitions appear to have been sent by them. In one of them it was stated that the church would prosper well if placed under the joint control of Mar Thomas and the Carmelites. This attitude had the secret support of many self-seaking men. It is said that bribes were offered to several rulers of Malabar to interest them in excluding the Portuguese influence. But the most powerful opposition was from the Dutch who hated the Jesuits, disliked Portugal and were actuated by no small aversion to the Pope. The Pope addressed letters to the king of Portugal and other people of importance to persuade the Dutch to withdraw their opposition to Ribeiro. But these efforts were in vain. Ultimately the Pope made the best of a bad bargain by issuing an order extending the authority of Bishop Angelus of Varapula over the churches of Cranganore and Cochin and such places in the territories of the Malabar princes if permitted by them. But Ribeiro was a man of resource. Retiring to Ambalakkada in the territory of Calicut and thus keeping himself beyond the power of the Dutch, he looked after his diocese till his death in 1715. Cranganore with all its property and its wealth of associations was thus lost to the Jesuits. The Jesuit college at Palliport was taken possession of by the Dutch and converted into a leper asylum.

^{*}Church History of Travancore, C. M. Agur, p. 249.

Puthenkur Syrians.

The Syrian Christians in Malabar were from the very beginning devoted to their own traditions repelling the insidious attempts made from time to time Jacobites and by the agents of the Western Church. But Antioch. they strove to maintain a permanent connection with the Eastern Church which they looked upon as the fountain of spiritual authority despite distances of geography and time. The more did Rome and its emissaries attempt to establish supremacy, the greater was the strength with which it was resisted. At the same time the Malabar Christians were anxious to establish some kind of connection with the Patriarchs of the East. The sect which revered the name of Jacob Baradeus as its founder continued its separate existence despite the vicissitudes of fortune, paying allegiance to the Patriarch of Antioch. As has been already seen, Ignatius XXIII who occupied the patriarchal throne considered the repeated application of the Malabar Christians with sympathy and sent them a bishop, Gregory, to minister to their spiritual needs.

Gregory came and was received with enthusiasm. His first act was to consecrate Archdeacon Thomas. event was one of great importance; for, it Gregory and Mar proclaimed in unmistakable terms the Thomas I. separation of a considerable number of Syrian Christians from the guardianship of Rome which was demonstrated by Menezes and sedulously affirmed by the Latin Church with the support of the Portuguese Government and the missionary organisations of the Jesuits and the Carmelites. Thomas, the new bishop, became a prominent figure not so much by his knowledge of doctrines as by his robust independence and organising capacity. The two bishops became the best of friends and strove jointly to place their church on solid foundations.

Mar Thomas I died in 1670 followed by Gregory two days after. Mar Thomas II, the brother of the first Thomas, a robust spirit.

Succeeded to the episcopate and governed for sixteen years. He was succeeded by his nephew Mar Thomas III, who held office for ten days only.* But Mar Thomas IV, the next bishop, ruled the church for more than forty years. The ordination of native priests did not prevent the Patriarch from sending prelates from among his own men in Syria. There was, however, no conflict between the two sets of priests. The relationship with Antioch was scrupulously maintained, which had its own advantages. The presence of foreign priests, the successors of Gregory, obviated the difficulties in the consecration of native bishops.

A new disturbing factor was, however, not long in. coming. In 1708 there arrived in Malabar Mar Gabriel who was appointed by the Nestorian Patri-A Nestorian arch of Babylon. He had served as Archbishop. bishop of Oburbigan, a diocese of the Nestorian Church. He appears to have been a man of no settled conviction, oscillating between Rome and the several eastern churches in a manner which suited his ambition. No sooner did he arrive in India than Propaganda sent him orders to quit.† But Gabriel was not the man to obey nor was he prepared to tolerate the interference of Mar Thomas IV. Thomas also was an ambitious person and took the earliest opportunity to protest to the Patriarch against the intrusion of Mar Gabriel. He repeated his representation as often as he could secure a means of communication. But the medium availed of does not appear to have been reliable.

^{*} According to G. T. Mackenzie he held office for two years. Travancore State Manual, Vol. II, Nagam Aiya, p. 202.

[†] Four years earlier he had made ventures to Rome to join the Roman Church.

Dutch carriers took the letters to Amsterdam. There was no means of knowing whether this was intentional or accidental.

The following passage from a letter of Mar Thomas (1720) is instructive. "Lord, I am not worthy to write to thy Greatness. But we write and we send letters because of the necessity of the orthodox Syrians of India, and we pray that thou mayest send to us one Patriarch and one Metropolitan and twin priests, who may be philosophers and may understand the interpretations of the Holy and Divine Scriptures. Previously there came to our country Mar Gregory, the fifth Patriarch of Jerusalem, and after him Mar Andeas Alvæus and after him came a certain Maphrian, Mar Basil Catholicus, and with him Mar John the Metropolitan and the Ramban Mattheus.

"Since their death we drift like a boat without a pole. If you wilt come to us, then, as God the Father promised to the sons of Israel, so may Jesus Christ. the Merciful and the Ruler, deal with you and so may the Holy Spirit the Paraclete console you. Amen.

"In the year of our Lord one thousand seven hundred and nine, there came a Metropolitan by name Gabriel the Ninivite whom Mar Elias Catholicus sent to me. But he held such a faith as that Christ had two natures and persons; and therefore we did not believe him except a certain priest called Mathew Beticutel and a few Portuguese Roman Catholics (Paucos quosdam homines Francos Romanos). We, however, have not wisdom that we may answer him. Therefore we report it to thee, our Lord.

"Charles, a Dutch doctor, and orientalist of repute, a learned man and a proved philosopher, our dearest and most beloved companion, dwells in Amsterdam, the first city of Holland. He has advised us that we may proceed in this matter with one mind. We have written to him in order

that this matter may be made known to Antioch: that you, through the mercy of God, may write one letter to the honorable Commandant who dwells in Cochin, which town is subject to the King of all India, and another letter to us: that it may bring us help against all our enemies and the infidel kings for ever; and that above all you will with the utmost care supplicate King Comphocius, who greatly honours the Dutch and is very illustrious among kings. This King gives judgment in accordance with equity and receives the petitions of the poor and greatly honours all this nation. And all these honour Antioch and despise Rome and they are right. Amen. My Lord, brilliant Ignatius (Domine mi Ignati ignee), take action without delay and diligently look after all this business, forgetting no part of it, through the living God. Amen. Especially pray, so that we may obtain a blessing through your prayers. Pray to the beloved Father and to the merciful Christ and to the Holy Spirit the Protector, and to the Virgin Mary, Mother of God, and the Saints. Amen. In the year of our Lord one thousand seven hundred and twenty, this epistle is written from Pharabur Patona, a Church of St. Thomas the blessed Apostle, on the twentyfifth day of the month Elul (September). Amen. Our Father &c. The Gate of all India".*

This makes it clear that whatever might have been Mar Thomas' view of the scriptures the capacity for philosophical interpretation was not one of them. Thus according to Mar Thomas the church would be 'like a boat without a pole' if there were no prelates sent by the Patriarch. It is also clear that he could not agree with Gabriel in regard to the two natures and persons of Christ, ideas which were not acceptable to the Malabar Christians. The solicitation of Dutch help against enemies and infidel kings is also a point of interest. If the letter is authentic, Mar Thomas must have been a man who was concerned in

^{*} Travancore State Manual, Nagam Aiya, Vol. II. pp. 204-5.

matters of temporal and spiritual authority; for, "he seems to draw a distinction between the teaching bishops across the seas and of the ruling bishops of whom he was the fifth".*

The rivalry between Thomas IV and Gabriel continued until the former's death which took place in 1728. Mar Thomas V who was consecrated as Difficulties continue. bishop independently of Mar Gabriel and without authority from Antioch succeeded him. The consecration was regarded as irregular and invalid by the bulk of the community. This gave added strength to Mar Gabriel to continue the fight. On his death in 1731 Mar Thoma V was free. But he was uneasy because of his lack of valid episcopal consecration. So he requested the Dutch authorities to bring a bishop from beyond the sea. Before they took any action a Mattanchēri Jew, Ezechiel. brought one John who turned out to be a bad man. Not only did he refuse to consecrate Thomas but also removed valuables from the churches and pledged them indiscriminately to obtain the wherewithal for his potations. The Orientalis Christiana describes him as a "heretic iconoclast in the schismatic churches, who burned with fire the images of the saints and even of our Lord Christ and also crosses. He gave wives to the priests, he stole the silver plates of various churches, he drank wine to excess and when drunk he caused various disturbances".† The scandal became so great that the Dutch were obliged to take him into custody and transport him to Bassora, where they left him in the same helpless condition as he was when they picked him up to be made a bishop.

Through the intercession of the Dutch three priests were got down from Antioch along with a chorepiscopus.

^{*} The bishop is known as Mar Thoma IV. But he called himself the fifth probably because Ahatalla was regarded as the first.

[†] Quoted by Mackenzie in his History of Christianity.

But difficulties in the payment of passage money led to unpleasant complications. The ambitious Thomas corresponded with Rome.* His letters evoked suspicions of his sincerity, for he jumbled together the case for the leavened bread and the necessity of driving away the Portuguese bishops. Reference to the sacerdotal authorities in Malabar and consultations in the college of cardinals in Rome took a considerable time.

In the meanwhile, the three oriental bishops settled down in this country, one of them at Kanḍanād, another at Mulanthuruthi, and a third at Kāyamkuļam. The chorepiscopus devoted his time more to private trade than to the spiritual ministrations of his flock. The foreign prelates were united in demanding that Mar Thomas should obtain reconsecration at their hands. But he refused to yield and his firmness was rewarded with ultimate success. As a set-off against Rome Thomas acknowledged the supremacy of the Jacobite Patriarch of Antioch and the foreign prelates agreed not to ordain any Indian as priest without his sanction.

In 1765 Mar Thomas V died and was succeeded by his nephew, Mar Thomas VI, who had been consecrated by the uncle himself a few years earlier.

The Tholiyūr Under him the affairs of the church changed distinctly for the worse. Gregory, one of the foreign prelates, consecrated Mar Cyril who was the leader of a party which opposed Mar Thomas. The latter apprehended Mar Cyril and placed him in custody. But he managed to make his escape and fled to Tholiyūr, where in 1774 he established an independent

^{*} Mackenzie says that, Mar Thomas probably in disgust at the failure to obtain episcopal consecration made overtures to Rome and agreed to unite with that church if the local Syrians were allowed to use the leavened bread for the Eucharist. He quotes letters which Mar Thomas wrote to the Pope. Travancore State Manual, Vol. 11, pp. 206—7.

church.* The special feature of the Tholiyūr see is that the bishops are independent of Antioch, each bishop consecrating his successor. The object of Mar Thomas in apprehending Cyril, as seen from the correspondence of the time, appears to have been to safeguard the rights of the Pakalamattom family for the headship of the Syrian Church.

By this time Travancore had expanded its territories to the borders of Cochin and the royal authority had established itself in the newly conquered State intervention. districts. The faction which arose in the Syrian Christian community became more and more frequent and the Government of Travancore was constrained to interfere so far as it was necessary for the maintenance of peace and order. According to the theories of sovereignty which ruled at the time the sovereign was competent to interfere in the affairs of religious foundations in order to promote the spiritual welfare of the people as well as to prevent breaches of the peace. Mahārāja Kārthika Thirunāl therefore called upon the opposing parties to reconcile The bishops could not legitimately their differences. refuse compliance. From the earliest times the succession to the headship of the church, whether in Antioch or in Rome, required for its enforcement the confirmation of a It did not matter whether the king was a Christian or a heathen. The Patriarch himself had to obtain confirmation of his election by the Sultan of Turkey. We have seen that in Malabar Menezes considered the support of the ruling princes as one of the pillars of his authority. The soldiers of the faja of Cochin had a prominent part in strengthening the position of Bishop Joseph against Archdeacon Thomas. The power of Travancore was now acknowledged by all. She had driven out the Dutch, annexed

^{*} Mackenzie says that the consecration of Mar Cyril by Gregory was during the time of Mar Thoma V. Travancore State Manual, Vol. II, p. 208. The view adopted here is that of Mr. P. Cheriyan.

the territories of the rajas of Thekkumkūr and Vatakkumkūr, conquered valuable districts from Cochin, suppressed the confederacy of the exiled rajas by the victory of Porakkād, and driven away the Zamorin and his invading army back to their homes. The English East India Company, proud of the valour of the soldiers of Travancore and the growing resources of its exchequer, highly valued the alliance with the Mahārāja.

Christian communities belonging to different persuasions were pursuing a peaceful life in many places in the dominions of the Mahārāja. The missionaries received nothing but kindness and curtesy at his hands. In these circumstances both parties respected the Mahārāja's suggestion of a compromise. They assembled in large numbers. As a result of the decision so, arrived at, Bishop Gregory consecrated Mar Thomas VI,

Mar Dionysius I was determined to establish and maintain the independence of his church. At the same time he was anxious to be in the good books of the Papal power.* The letter addressed by him to Rome in 1779 deserves careful perusal.

who assumed the name Dionysius I.

"When I took charge I understood from the Jacobites who came during the rule of my predecessors, as well as from the learned priests of the Roman Catholic Church, that I had the true ordination and that the priesthood I received at the hands of my predecessors was not valid and therefore, humbly hearkening to their admonition, in 1772

^{*} The leaning of Mar Dionysius I towards Rome is thus explained by Whitehouse: "There is no doubt that the Syrians and Romo Syrians were very much mixed up together at this time and approached one another far nearer in sentiments and practice than they do nowadays; for no fewer than eighteen churches were regarded as the common property of both parties. In some the services were performed by the Syrians indifferently." (Lingerings of Light in a Dark Land, p. 203).

I received anew in the Church of the Blessed Virgin Mary at Niranam all the Holy Orders, from the tonsure to the episcopal consecration, from the Jacobite Metropolitan, Mar Gregory. Further, I was convinced from the learned priests of the Catholic Church, as well as from the books of the Sacred Councils, that the creed which I have received is not orthodox, and also that no one can be saved without the Catholic Faith, which from the days of our Lord to the present day remains spotless and immaculate. Through the medium of the above-said priests I made an earnest prayer to Don Salvador dos Reis, Jesuit Archbishop of Cranganore, and to Fra Florentius of Jesus, the Carmelite Vicar-Apostolic of Malabar, asking them to receive me together with my people into the communion of the Catholic Church and absolve us from the excommunication which had befallen us in the days of our fathers. And further, I asked them that in case they could not receive me, they would kindly send my request to the Apostolic See of Rome, but they refused to give attention to my prayer. So I sent for Father Joseph Cariatil of our nationality, a student of the Propaganda College, and with tears in my eyes and with deep sorrow I revealed my mind to him and put the salvation of my soul into his hands, and he promised me, saying, 'I shall go to Rome a second time for you even at the risk of my life on the way.' With him therefore I send eight other persons from among my Syrian people, of whom some are priests and others secular, to represent me before the Apostolic See and to inform the Sacred Congregation of the Propaganda of my petition. So far as it lies within my power, I with my people swear before the Omnipotent God and promise to embrace and believe with our whole strength what the Catholic Church embraces and believes."*

The question raised remained undecided for more than twenty years. Investigation after investigation was made

^{*} Travancore State Manual, Vol. II, Nagam Aiya, pp. 209-10.

into the antecedents, the character, the faith and the motives of Mar Dionysius. At last in Mar Dionysius' 1796 a conference was held at Quilon. position. But no agreement was possible because the hereditary right of the Pakalamattom family stressed by Mar Dionysius and his party was not acceptable to the Roman The followers of Mar Dionysius insisted on ecclesiastics. the recognition of the hereditary archdeacon to govern their church though they were prepared to admit that foreign prelates were required to consecrate the local men of religion. The conference therefore failed in its purpose. But the pacuniary embarrassment of Mar Dionysius advanced the solution. The Mahārāja of Travancore was pressing him for the payment of moneys due and the proud archdeacon had no choice in regard to a proposal which emanated from Mathoo Tharakan, a rich Syrian Christian of the Roman persuasion. Tharakan promised to advance the money if the debtor submitted unconditionally to the Catholic Church. Mar Dionysius accepted the proposal and signed a bond in 1799 in the church of St. Michael at Tattampally in the presence of Bishop Panderi Pailo,* making an absolute abjuration of his heresy accompanied by a solemn profession of the Catholic faith. But the abjuration itself was abjured soon after.

From the beginning of the 19th century the influence of the missionary bodies of the west in shaping the growth of Christianity in Travancore began to make itself felt. The Danish Mission, the London Mission and the Church Mission Societies made their entrance into the evangelical field in India with a firm determination to effect conversions. In 1806 Dr. Kerr was deputed from Madras and Buchanan from Calcutta under commission from Lord Wellesley to study the conditions of Christianity as it obtained in Malabar.

^{*} He was consecrated by the Chaldean Patriarch.

At this time the Christians on the Malabar coast were divided into three sects. 1. The Jacobites 2. The Syrian Roman Catholics, and 3. The Latin Roman Catholics.

- 1. The Jacobites retained their ancient creed and usages and believed that they were descended from the flock established by St. Thomas. They were not image worshippers, but a figure of the Virgin Mary with the child Jesus in her arms, which was considered merely as an ornament and not a subject of worship, found a place in their churches. In some of them divine service was performed alternatively by the priests of the Christians of St. Thomas who adhered to their ancient rites and by those who were united with the Church of Rome.
- 2. The Syrian Roman Catholics were those who were constrained after a long struggle to be in the Roman Catholic Church and who continued in her pale though distinguished from her in this that they are allowed, by a dispensation from the Pope, to perform all their services in the Syro-Chaldiac language. They were under the authority of the Metropolitan of Crānganore and the Bishop of Vafāpula. They were more numerous than the members of the Jacobite Church. Their clergy numbered about four hundred spread through the ancient churches; and by retaining their language, and acting under the direction of the Church of Rome, they by no means unassayed to draw over their primitive brethren to the Latin communion.
- 3. The Latin Roman Catholics were subject to the Primate of Goa, under whom there was an archbishop and two bishops. They owned numerous churches but being generally poor, they had to be supplied with priests from Goa. One vicar held on an average five or six churches.

The doctrines of the Syrian Church were few in number. According to Buchanan the following are the most important:—

- 1. They hold the doctrine of a vicarious atonement for the sins of men, by the blood and merits of Christ, and of the justification of the soul before God 'by faith alone' in that atonement;
- 2. They maintain the regeneration or new birth of the soul for righteousness, by the influence of the spirit of God;
- 3. In regard to the Trinity, the creed of the Syrian Christians accords with that of St. Athanasius, but without the damnatory clauses. On this point Buchanan quotes a letter sent by the Syrian Metropolitan to Col. Macaulay.
- "'We believe in the Father, Son, and Holy Ghost, three persons in one God, neither confounding the persons nor dividing the substance, one in three, and three in one. The Father generator, the Son generated, and the Holy Ghost proceeding. None is before or after the other; in majesty, honor, might, and power, co-equal; unity in Trinity and Trinity in unity'. He then proceeds to disclaim the different errors of Arrius, Sabellius, Macedonius, Manes, Marcianus, Julianus, Nestorius, and the Chalcedoneans; and concludes, 'That in the appointed time, through the disposition of the Father and the Holy Ghost, the Son appeared on earth for the salvation of mankind; that he was born of the Virgin Mary through the means of the Holy Ghost and was incarnate God and man'."*

The Syrians were alive to the advantages which they might obtain from the intercourse with the Protestant missionaries who, it was believed, possessed considerable influence with the British Resident in Travancore and Cochin and others in authority. The missionaries and their patrons hoped that the diffusion

The missionaries and their patrons hoped that the diffusion of education and the concentration of effort would eventually succeed in bringing about their union with the

^{*} Christian Researches in Asia, Buchanan pp. 124-125.

Church of England. But signs of resistance were not wanting. Buchanan himself has described the attitude of the Puthenkur Syrians thus: "'The English', said they, 'may be a warlike and great people; but their church, by your own account, is but of a recent origin'. 'Whence do you derive your ordination?' 'From Rome'. 'You derive it from a church which is our ancient enemy, and with which we would never unite.' They acknowledged that there might be salvation in every church where 'the name of Christ was named'; but on the question of Union, it was to be considered that there had existed a pure Church of Christ from the earliest ages; that if there was such a thing in the world as Ordination by the laying of hands in succession from the Apostles, it was probable that they possessed it; that there was no record of history or tradition to impeach their claim. I observed that there was reason to believe that the same Ordination had descended from the Apostles to the Church of Rome. 'It might be so: but that church had departed from the faith'. I answered that the impurity of the channel had not corrupted the ordinance itself or invalidated the legitimacy of the imposition of hands; any more than the wickedness of a High Priest in Israel could disqualify his successors. The Church of England assumed that she derived Apostolical Ordination through the Church of Rome, as she might have derived it through the Church of Antioch. I did not consider that the Church of England was entitled to reckon her ordination to be higher or more sacred than that of the Syrian Church. This was the point upon which they wished me to be explicit. They expected that in any official negotiation on this subject, the antiquity and purity of Syrian Ordination should be expressly admitted".*

Buchanan's attitude towards the Syrians was kind and conciliatory. The Metropolitan of Malankara after

[·] Christian Researches in Asia, Dr. Buchanan, pp. 131-32.

consulting his clergy wrote to him "That an union with the English Church, or, at least, such a A fair prospect. connection as should appear to both churches practicable and expedient, would be a happy event, and favourable to the advancement of religion in India".* The object of the Protestant missionaries was to reduce Roman Catholicism quite as much as Hinduism. It was believed that the prestige of the British Government and the support of its officers would facilitate their work though at the beginning of their period of missionary enterprise, the Court of Directors emphasised the strictest neutrality. "When I reflected", says Buchanan, "on the immense power of the Roman Church in India and on our inability to withstand its influence alone, it appeared to be an object of great consequence to secure the aid and co-operation of the Syrian Church and the sanction of its antiquity in the East". With this object in view he advised the Syrians as well as the missionary bodies to bring about a union, a mutual and friendly recognition of one another on the part of the two churches, each being acknowledged to be an independent branch of the one universal church and nothing more. service in the Syrian Church was in some respects similar to that of the Church of England. As the doctrines of transubstantiation and purgatory were not subscribed to by the Syrian Church, and as extreme unction, marriage and confirmation were not admitted as sacraments, a common bond based on a common opposition to the Roman Church was easily discovered. The age of the Malabar Church in general and the intelligence of the Syrian Christians were advertised in England by Buchanan and other Protestant missionaries to such an extent that the old spirit of indifference on the part of the British public yielded to an enthusiastic effort to collect funds for the propagation of the faith.

^{*} Christian Researches in Asia, Buchanan, p. 133.

Col. Macaulay "inclined the Travancore Court to the belief that all the Christian churches are, and necessarily must be cognizable, in respect of interior management and the appointment of bishops, by the Christian king, who is now sovereign of India".* In another letter Buchanan expressly states that the aid given to the Christians in Travancore by the ruler was the result of the Resident's influence.† The Resident influenced the Travancore Government to make a grant of Rs. 21,000 to be divided between the Puthenkūr and Palayakūr Syrians. The money was

invested with the East India Company as a perpetual loan. Macaulay was very friendly with the Carmelites at Varapula and he used to go and stay there frequently in order to learn the Italian language. While there he delighted to help the spread of Christianity with his advice and

It was on one such occasion that Māthoo Tharakan, repaired to Varāpula, confessed his faults and asked forgiveness. It is a proved historical fact that Māthoo Tharakan received the kindness and support of the Resident when the Travancore Government attempted to vindicate the law and realise the revenues due to them by issuing coercive processes against him. In the beginning of 1809 Tharakan who was condemned to death for treason against the British Government and for inciting rebellion in Travancore secured the assistance of Bishop Raymond to intercede between him and the Resident to release him from the punishment of death. Macaulay got

The Resident was solicitous of the interests of the Catholics and the Protestants alike. When Ringletaube,

the punishment of death converted into one of fine.1

^{*} Letter by Buchanan to Brown, quoted by C. M. Agur in his Church History of Travancore, p. 94.

[†] Letter to Thornton quoted by C. M. Agur.

¹ Church History of Travancore: C. M. Agur, p. 292.

the Protestant missionary, requested him for a passport which should enable him to travel through the territories of Travancore, Macaulay not only secured for him the permit, but also contributed from his own purse the money to defray the expenses of the journey. Similarly, when that missionary applied for sanction to build a church at Mylāḍi, he volunteered to meet the cost thereof.

The political condition in the closing years of Macaulay's tenure of office as British Resident prevented him from doing as much as he wished for the propagation of Christianity. But he was the first of a succession of British representatives who utilised their official position for spreading the faith. He was held in great respect by the missionaries and the appreciation recorded by Buchanan clearly shows the estimate of his work in Travancore. "The wall between Hinduism and Christianity", wrote he, "seems. to be tottering. You have applied the battering ram to that wall with good effect in Travancore and I sincerely wish that you could stay to give it a few more shocks".* battering ram of Macaulay became a trowel in the hands of his successor Col. Munro who spared no effort to establish identity of interests between the Church of England and the Syrian Church in Malabar.

It was in his time that the agitation in Parliament to remove the obstacles from the path of conversion culminated in the passing of the Emancipation Act of 1813. The religion of the Hindus, it was contended by those who opposed the bill, was pure and unexceptionable. Buchanan's description of its ceremonies was characterised as "an imposition upon England and a libel on India". But the duty as well as the right of a Christian government to help the Christian religion was painted in so convincing a manner that the opposition lost its force.

^{*} Buchanan's letter dated 13th April 1807 to Col. Macaulay, quoted by C. M. Agur in his Church History of Travancore, p. 105.

In 1814 A. D. commenced the episcopal period of Christianity in India. The labours of the missionaries received the active support of governors-Munro and the

new policy.

general and provincial governors. Officers of the East India Company carried on mis-

sionary propaganda side by side with their work in the collection of revenue and the administration of justice. Those in the outlying districts and spheres of influence were in a more advantageous position; for, the fields of their activity lay beyond the provinces committed to their direct administrative charge over which alone the Parliament threw its searchlight at the suggestion of secular-minded critics. Munro was a soldier, strong in his own convictions and pledged to serve the Almighty by spreading His Kingdom upon the earth. Hough, whose pages bear throughout an unmistakable animosity towards the Catholics, quotes from one of Munro's letters * to describe the plight of the Puthenkūr Syrians in Travancore. "On their separation from the Roman Church they were exposed to powerful enemies and various dangers". The Romanists "regarding their succession as an act both of apostacy and rebellion. persecuted them with unrelenting animosity; the princes of the country seeing their defenceless state considered them as fit subjects for plunder and insult; they were destitute of religious books, pastors and instruction; they had lost in their union with the Jesuits the pure system of religion and morals and the high spirit by which they were formerly distinguished; and the Dutch, formerly in possession of Cochin, whose policy was marked with perfidy and meanness; abandoned them to their fate. They were exposed to still greater calamities in the conquest of their country by the faja of Travancore. The blighting influence of that despotic and merciless government was felt by them in the most aggravated degree and they were reduced to the lowest state of poverty and depression".

^{*} History of Christianity in India, James Hough, Vol. II.

This is high-flown language. It is a camouflage and not a record of actualities; for, all authorities are agreed in giving credit to the Government of Travancore for its tolerant policy inaugurated before the establishment of British supremacy in India and pursued without intermission ever since. Earlier than Munro, Fra Bartholomew and Canter Visscher expressed their appreciation of that benevolent policy. The former who knew the conditions of Malabar earlier than Munro and better than Hough considered the extinction of the dominions of the petty Malabar sovereigns and princes as a blessing to the people.* The work of Marthanda Varma the Great, and Kama Varma, the Dharma Kaja, was thorough and lasting. There was not a single prince in the whole of the territories now comprising Travancore who exercised independent political authority. Kāma Varma, was kind to the Christians of all denominations and was so liberal-hearted that he gave his own money for the maintenance of churches and cultivated the firm friendship of the spiritual head of that faith. Munro himself has expressed his appreciation of the sympathetic policy of the two Ranis in whose reigns he worked as Resident and Dewan. Thus, if Munro did write the letter which Hough has quoted, it was only to enlist the sympathy of the Christian powers and to draw out the best philanthropy of the west.

There is, however, solid ground to warrant the conclusion that Munro had proselytising spirit more than the missionaries themselves. He disapproved of Hinduism; he abhorred the Roman Catholic faith; he believed that the English Church alone could save the souls of the people of India; and he loved the Puthenkūr Syrians and gave them his unfaltering encouragement in order to raise them to a high level of efficiency, hoping that they would by proper treatment coalesce eventually with his own church. With this purpose in view he lectured to the missionaries. He

^{*} Voyages to the East Indies, Fra Bartholomew, p. 172.

encouraged the translation of the Bible into Malayalam. He paid the marriage expenses of the kathanars. He collected money for the construction of schools and persuaded the rulers of Travancore and Cochin to render pecuniary help to the missions, grant sites and building materials for churches, bungalows for the missionaries, and paddy lands in support of their educational institutions. Believing that official position would alone elevate the Christians to influence in the State, he appointed large numbers of them in the several ranks of the public service. "Her Highness made it a rule that there should be a Christian judge in every Zilla Court. The appointments of Christians as judges added to the respectability of the community and made it less difficult for their co-religionists to resort to the public office whenever they had to transact business."* It was only a few weeks before his final departure from the State that the Rāņi Pārvāthi Bāi was persuaded to grant 2,000 acres of productive land for the Köttayam Seminary. was taken advantage of by Munro who combined in himself the powers of counselling and ratification at the same time. though the former function was performed in the capacity of the Dewan and the latter in that of the Resident. Whether this was sound policy may be open to doubt, but Munro did what he felt he was bound to do for his religion. His work in that direction has elicited the appreciation of many a Christian writer. The Travancore High Court has set the stamp of its approval on the accepted opinion that Munro never spared to use his influence to that end. His efficient administration of the State during a period of financial embarrassment enabled the Government to pay a considerable sum more than what was due to the British Government as arrears of tribute. But when the over-payment was discovered. Munro suggested that the amount refunded might be paid towards the benefit of the Puthenkur Syrians; and

^{*} History of the Malabar Syrians and the Church Missionary Society, Mr. P. Cheriyan, p. 86.

it was done. "The object of this endowment was the political, moral and religious renovation of the whole of the Syrian people through the instruction of the English missionaries. In 1816 the Travancore Government made the Syrians a donation of Rs. 8.000 to enable them to prosecute the study of the holy scriptures according to the custom of their sect.....by means of the dissemination of the Bible and other religious works in the vernacular amongst the Syrians in general." Col. Munro observed that "the principal object of the establishment of a college in Travancore was to instruct the kathanars and officiating priests amongst the Syrians in a competent knowledge of the Syriac language in which they were apparently too generally deficient......With the study of the Syriac language would of course be combined that of the scriptures and other religious books written in that language." All this was done for the Puthenkur. But Munro did nothing of the kind for the Romo Syrians. "The one thing that he seemed most anxious for Syrians. in their case was that they should find their way to the Puthenkur Syrian Church." In the same year another donation of Rs. 20,000 and the isle of Munro near Kalladay was given free of tax through the influence of the Resident. He encouraged the people to place their complaints as well as their wants and wishes before the missionaries so that those matters might either be decided by himself or be placed before the Rāṇi with the impress of his recommendation. It was with that purpose that Munro selected Alleppey for the headquarters of Mr. Norton for, situated within a convenient distance from the Jacobite and Roman Catholic centres, the place promised great facilities for efforts in establishing union from division, making a compromise of inessential details without sacrificing the fundamental of the Reformed Church.

Such was the project of this Christian statesman for the amelioration of the Syrian community. He proposed

to place at the disposal of the ecclesiastics the means of their own reformation. At this time Stand made by Mar Thomas VIII who had succeeded Mar Mar Thomas VIII. Thomas VII in 1809 was the metropolitan of Malankara. Munro was prepared to play the school master to the clergy as well as to the laity. He was not deterred from assuming the powers of correction and control, thus constituting himself into a kind of modern The dissensions within the fold of the pater familias. Puthenkur Church fed individual ambition to such an extent that metran after metran sought the Resident's intervention. The reputation of Munro for Christian sympathy encouraged the contending parties to submit their disputes to his decision. If there was an opportunity which he might use in the interests of the Syrian Christians, Munro was not the man to miss it. He interceded with the Government of Madras on their behalf. His advocacy was so powerful that in 1813 the Madras Government sent seventeen questions to Mar Thomas VIII regarding the organisation of the Puthenkur Church and the rules which controlled the election of the metran and the proper discharge of the functions. "The metran disregarding his personal interest spoke the mind of the community in his answers."

Mar Thomas VIII died in 1816 after consecrating Mar Thomas IX as his successor. Complications had alDionysius II recognised as Malankara metran. Tholiyūr, aspiring to secure control over the Malankara Church, had consecrated Joseph Ramban as metropolitan with the designation of Mar Dionysius II in 1815. Munro took upon himself the power of final decision and upheld his authority to consecrate the metran for Malankara. Mar Dionysius II was thereupon recognised as the bishop of the Puthenkūr Syrians in Travancore.

^{*} He was the successor of Mar Cyril.

He proceeded to Kadamattam where Mar Thomas was staying, and forcibly divested him of his staff, mitre and vestment. All his properties were seized. The people acquiesced in all this as they believed that Dionysius had the full support of Munro in everything that he did. The Royal Court of Final Appeal observes:— "But for that support the people of Malabar would not have tolerated such an usurpation". The people had a moral justification too for maintaining this attitude, because Mar Thomas IX had not been properly consecrated, the ceremony having been performed by his partisans catching hold of the hands of the dying Mar Thomas VIII and imposing them on the head of his successor.

Mar Dionysius II died shortly after without consecrating a successor. That gave the opportunity to Munro to impress his will once more on the Government decides Syrian Christians. Old Philoxinos was again brought to Travancore. As his status and authority were contested by a party under Konat Malpan, a royal proclamation* was issued in 1817 notifying Philoxinos as Metropolitan and commanding all Puthenkur Syrian Christians to be obedient to the control and orders of their Metropolitan. Philoxinos was too old and indisposed. So he consecrated Punnathara George Kurien Kathanar as metran in 1818. This was done only after securing from him a definite promise that he would co-operate with the Protestant missionaries in adopting whatever measures that might be deemed necessary for the prosperity of the church over which he would preside. The metran assumed office as Mar Dionysius III. Thus the theory of consecration by the Patriarch of Antioch was cast to the winds and the Resident performed a function similar to that of the Sultan of Turkey whose declaration became the authoritative credentials of

^{*} There are several proclamations of this nature which show that the authority of the bishops depended on their recognition by the Government. Vide pp. 21, 27, 64, 77, 92, etc., of Select Proclamations by the Sovereigns (Fravancore) 1811-1936, Travancore Govt. Press, 1937.

the Patriarch of Antioch. On this point Mr. Agur observes: "The Royal Proclamation in favour of the native Metropolitans gave them an air of independence and greatly discountenanced Antiochean or foreign interference in native churches though it seems strange that the Travancore Government should have considered it a part of their duty to thus concern itself with the internal affairs of the Syrian Church by commanding the Syrians to render implicit obedience to the authority of the metropolitans on pain of severe punishment to the disobedient."*

The following proclamation by the Travancore Government followed immediately:—

"Whereas Philoxinos the Metropolitan is ill and indisposed and Mar Dionysius Metropolitan has been consecrated by Mar Philoxinos as his successor to govern the Syrians and the Syrian churches, this is to inform all the Syrians in this country that they should obey Mar Dionysius Metropolitan".

On this recognition the Royal Court of Final Appeal made the following observations:

"What had Mar Philoxinos, the Bishop of Tholiyur, which had been separate and distinct from Malankara hitherto to do with the latter? It is said in the proclamation that Mar Philoxinos consecrated Dionysius as his successor; but it must be borne in mind that Philoxinos was never Metropolitan of Malankara and, therefore, his appointment of Dionysius as successor could not have any reference to Malankara. Philoxinos could only appoint a successor to the office that he himself had held. It is altogether meaningless to say that he appointed a successor to an office that he had never held or that had never been under him.

"The Government which had hitherto never interfered, though there had been many urgent occasions for such interferences, with the appointment of metrans to Syrian churches unsolicited, came forward readily to issue a

[•] Church History of Travancore, C. M. Agur, p. 115.

proclamation to recognise the consecration of a person who himself felt that it was imperfect without the imposition of hands by the Patriarch or his delegate.

"Such extraordinary violation of the rule or practice hitherto strictly observed and such utter disregard of the feelings of the people and the Metropolitan himself could not do away with the rule altogether. It could only be treated as an exceptional case and not in the least degree affecting the long established practice".*

Mar Dionysius III respected the authority of Antioch but was anxious to retain the confidence and attachment of the C. M. S. missionaries. In order to secure their favour he handed over to them the college which the Syrians with the aid of the Rāṇi had erected at Kōttayam and permitted the missionaries to preach and teach in his Syrian churches. Thus the C. M. S. missionaries began to exercise much influence over the Syrian community. But while still young, Mar Dionysius III died of cholera in 1825 without appointing a successor.

The services of Mar Philoxinos became indispensable again. He was proclaimed by the Government "as the lawful metropolitan of the Malankara Church". In order to provide against the contingency which might be caused at no distant date by the death of the old man, the Pallikkār in consultation with C. M. S. missionaries elected Philippose Malpan of Chepat by casting lots. He was consecrated by Philoxinos himself as Mar Dionysius IV and the disputes were set at rest by another Royal Proclamation of 1827. Thus in the interests of political expediency the Travancore Government was persuaded to virtually ignore

^{*} Judgment by the Chief Justice and Mr. Sītārāma Aiyar.

the authority of Antioch and take upon themselves the power of declaring who was the bishop of the Puthenkur Syrians and who was not. Soon after this the C. M. S. missionaries pressed for the proposed union between themselves and the Syrians "in religious affairs". The metran agreed to do so but gave no sanction for the removal of any of the practices of the church.

The Syrians did not fail to keep the Patriarch informed of these happenings in Malabar. The Patriarch sent Athanasius, Metropolitan, and Abraham Antioch kept out. Ramban for the government of the Malankara Church. Armed with that authority and supported by credentials from Bishop Heber whom they met at Bombay, the two priests arrived in Travancore in 1826 with the object of undoing the ten years' work of the C. M. S. missionaries. They declared all consecrations after the time of Dionysius I invalid, insisted on re-consecrating the priests who were then functioning, and threatened to excommunicate Mar Dionysius IV and the aged Mar Philoxinos. They conferred fresh orders and excommunicated those who did not submit to them. Immediately after their arrival they presented their credentials to Col. Newall, the British Resident, and demanded the recognition which they said was their due. But the Resident, the English missionaries and the Sirkar sided with the native metran and the foreigners were left almost helpless. The Resident said that for many years in the past the bishops consecrated locally were performing their office with the approval of the people, and told them that their claims required due investigation in consultation with the Mahāraja of Travancore, the native metropolitan and the clergy. At the same time, he promised passports which might enable them to travel in the country and pay visits to the churches if they should so desire. Athanasius and his associate insisted on immediate recognition and administered to the Resident what they believed

to be a threat that they would otherwise return home. Col. Newall promptly replied that they were at liberty to do so. He even offered them the money to defray the expenses of their return journey. The display of temper by the priests displeased the Resident, but, true to his word, he gave them the promised passport. The Antioch priests proceeded to Kottayam, insulted the Metropolitan and created a crisis by consecrating some of the kathanars who were then functioning and excommunicating others who refused to yield to the rite. They drew a small party of Puthenkur Syrians to their side; for, there was a great section of opinion which still looked upon Antioch as the seat of spiritual authority. If Athanasius and his friend were satisfied with giving advice on spiritual affairs and directing church ceremonies, a friendly adjustment of differences might have been possible. But a right of dealing with temporalities was equally important to them and they refused to give up their pretensions. Disputes between the two sections led to breaches of the peace. The Resident advised the Travancore Government to re-issue the Proclamation of 1817. nominating Mar Philoxinos as Metropolitan of Malankara. The foreign prelates were expelled by order of the Government and the leaders of their party were imprisoned. In all his schemes Mar Dionysius IV had the whole-hearted support of the Church Mission authorities and the Resident. The position is thus described by Rev. Howard: "The English missionaries were now able to carry on their designs under the most favourable circumstances with a friendly metropolitan to support their efforts and possessing considerable influence with the British Resident and through him with the native Government. It is not easy to conceive a more hopeful condition of success; and whatever opinion we may entertain regarding the character of their proceedings, it must be admitted that they applied themselves to their work with unsparing energy and devotion".

The death of Philoxinos in 1829 effected a change in the attitude of the party under Dionysius towards the missionaries. Encouraged by the alliance Attempt at which grew through twenty years of intirapprochement. mate association and mutual assistance. the C. M. S. authorities proposed certain reforms in the religious practices of the Puthenkur Syrians. The proposal met with a resolute resistance on the part of Mar Dionysius. The Church Mission Society deputed their most prominent representative in India, Bishop Wilson of Calcutta, to settle the differences. A conference was held at Kottayam on the 21st November 1835. The Anglican bishop suggested six points to Mar Dionysius for consideration and accceptance. They were:

- 1. That the priests must be ordained by the metran only when their fitness was proved by the production of certificates of qualifications.
- 2. That accounts relating to the property of the Church should be revived every year.
- 3. That means should be devised for providing priests with a permanent source of income for their maintenance.
 - 4. That schools should be established in all places.
- 5. That the priests should expound the Gospel to the people.
- 6. That the prayer should be rendered into the vernacular and that one of the liturgies of the mass should be translated into Malayalam.

It is obvious that the object of these innovations was to enhance the influence of the young men who were educated in the seminary at Kōttayam. They, it was believed, would diffuse the new ideas among the masses. The directions regarding the use of the vernacular in offering prayers and preaching sermons would, it was probably hoped, make the listeners reflect upon the truth of the Gospel and persuade them to accept the interpretations put upon them

by the new school of clergymen. The metran promised to bestow the most careful attention to the proposals and accepted the sum of Rs. 1,000 which was presented by Bishop Wilson to the church as a token of his good will.

Mar Dionysius could ill afford to do anything as he liked. He knew the spirit of sturdy independence which characterised the religious aspirations of Synod of Mavelihis followers. It was true that they had ka jai. a fascination for the name of Antioch, but even the Patriarch's behests would not induce them to abandon the time-honoured practices and the hallowed rituals. The new turn in the affairs of the church gave him the necessary stimulus to organise a party of reaction. In less than six weeks after Bishop Wilson left Travancore with high hopes, the Puthenkur Syrians met in synod at. Māvēlikara in January 1836 to consider the suggestions put forward by the Anglican bishop. The assemblage was a large one. Fifty kathanars attended. Mar Cyril of Tholiyur, the successor of Mar Philoxinos, was also present. Mar Dionysius presided over the meeting and regulated its deliberations. But his desire for the continuance of the amicable relationship with the missionaries and a spirit of compromise with the six points of Wilson did not commend itself to the assembly. The clergy who had mustered strong passed strongly-worded resolutions. While gratefully recognising the good work done by the missionaries for their advancement, they deplored their action in "managing the seminary without consulting the metropolitan, dispersing the deacons instructed in the seminary, conducting affairs in opppsition to the discipline of our church, and creating dissensions amongst us, all of which have occasion to much sorrow and vexation". They affirmed the supremacy of the Jacobite Patriarch of Antioch and declared that they would not deviate from the liturgies, ordinances and discipline of their own church. It was also emphatically

declared that an individual belonging to one persuasion was not authorised to preach and admonish in the church another following a different persuasion without the permission of the patriarchs. They held that "the Malabar Syrians could not permit such a thing being done among them". "For this reason", they said, "we would not follow any faith or teaching other than the orthodox faith of the Jacobite Syrian Christians to the end that we may obtain salvation through the prayers of the ever happy, holy and ever blessed Mother of God, the redresser of all complaints, and through the prayer for all Saints".

Thus the breach with the C. M. S. missionaries having become complete, a panchāyat was constituted consisting of three members nominated by the Division of pro-Travancore Government, Mar Dionysius perties. and the Church Mission Society, each nominating one to divide the property which had been held in common till then. In 1840 the award was made by which Mar Dionysius was to retain the endowment of 3,000 Star pagodas and the college at Kottayam. Not satisfied with the decision the bishop complained to the Madras Government. But they declined to interfere. The Court of Directors to whom he again appealed, however, held that the arbitration was irregular and directed that the matter should be settled by a court. But before the order of the Court of Directors was received in India, the Resident had executed the award in favour of the C. M. S. missionaries. Mar Dionysius took no further steps.

The missionaries on their side did not fail to counsel compliance with their scheme nor did their words fall on deaf ears. Individuals and certain congregations began to feel the necessity for reform. The movement was led by Abraham

Malpan of Maramon. Ordained as a deacon while yet a boy and gaining a more than ordinary knowledge with the Syriac language and theology, he became a priest in his 16th year. He was one of the kathanars who took advantage of the permission granted to the Jacobite priests in the time of Munro to enter into matrimony. Abraham became the father of several children two of whom were destined to become metrans. Shaking himself free from the attractions of a home and an admiring congregation, he proceeded to Kottayam, where after two years of study he accepted the post of Malpan or Professor of Syriac in that college. As he graw older, he began to feel that his ordination by Mar Thomas VIII was not valid as the metran himself had received but an irregular consecration. When therefore the Patriarch's nominee, Athanasius, came to Travancore, he accepted re-consecration at the hands of that prelate in 1826. For this act of abundant caution he was imprisoned by order of the Travancore Government on the ground that he submitted to a foreign bishop who was not recognised by competent authority in Travancore and thus contravened the orders of government. Abraham was a friend of the missionaries who were glad to consult him on matters pertaining to their affairs. But he would not enter the C. M. S. Church. He preferred to remain where he was, hoping to effect certain reforms from within. He preached that in the liturgy (Thaksa) in use among the Puthenkur Syrians there were many unscriptural doctrines and practices. He taught that the doctrinal reforms suggested by the missionaries were in accordance with scripture. He would rather join the Anglican Church if his own coreligionists would pay no heed to the claims of reformation. However, he would not leave his church without making an effort for improvement. Seeing that his presence among his people was absolutely necessary for the success of his scheme, Abraham resigned his post in the college and betook himself cheerfully to educate the opinion of the

Puthenkur Syrians on whom he could exert his influence. The pace of progress being found to be slow the reformers had already pulled down and destroyed a wooden image * in his parish church and stopped the celebration of an annual festival which used to bring in a large sum of money.

Among the reforms introduced by him Mr. Cheriyan mentions the following:—

"The regular Sunday services were conducted in Malayalam. Auricular confession, prayers for the dead, invocation of the Blessed Virgin and the Saints and the celebration of the Eucharist when there was no one to communicate along with the officiating priest were all put an end to. In administering the Lord's Supper he made it a rule to administer the Bread and wine, separately to the Laity as in the Protestant churches; but he did not follow their example in following the filioque clause into the creed. He took care to see that, subject to these innovations, the form and exterior of the Kurubana service and the arrangement for public worship were changed as little as possible. Perhaps the greatest change that he introduced was to arrange the regular reading of the passages from the old and new testaments during the service in addition to the Gospel and Epistle for the day and to preach regularly to those who assemble for Divine Worship. Profanation of the Lord's Day being very common among the Syrians for many generations, he adopted plans for the strict observance of that Day by every member of his congregation. In order to popularise the reformation he took special care to have the bible regularly read and family worship held in the houses of his Parishioners". †

^{*} It is difficult to find out the exact nature of this innovation, for the Jacobites do not seem to have worshipped images.

[†] The Malabar Syrians and the Church Missionary Society: P. Cheriyan, p. 290--91.

The doings of the Malpan which had the support of considerable numbers who were drawn to his banner confirmed Mar Dionysius in his indignation Excommunication. against the reformed party. The reformers, on the other hand, waited upon the Resident, complained against the unsympathetic attitude of Mar Dionysius towards the missionaries, and inveighed against the venality and corruption which characterised the administration of the church. The Resident was also petitioned to give the sanction for the contemplated reforms. But the days of Munro were past and Col. Fraser gave little countenance to their request. Thrown to their own resources Abraham and his party resolved to make the secession permanent. Mar Dionysius retorted by excommunicating several congregations and publicly declaring that he would not raise to the priesthood any of the deacons who followed. the Malpan.

The work of Abraham Malpan, however, was not without its results. Many Syrians of the reformed party joined the Anglican Church in places like Elanthur, Erikad, Thottakkad, Puthuppally Advance and retreat. and Köttayam. But before long they found the new environment quite unsuited to their cherished practices. "It must have cost the early Syrian adherents of the local Anglican Church a good deal to have joined a church in which Extreme Unction was not permitted, from whose services Syriac was completely shut out, and from whose places of worship the wooden Cross and incense and so many other things with which they were familiar in their mother church, were rigorously excluded." The conservative spirit of the Syrians was greatly shocked by the attitude of the missionaries in the matter of the marriage of their daughters. The Syrians who would never give their girls in marriage to non-Syrians were advised to give up the 'meaningless' distinction. There was one more reason for dislike, which prevented them from going over to the Anglican Church. They could not brook the idea of their being treated as no better than converts from the lower castes. All these contributed to create an unrest among the Syrians and they thought it prudent to remain where they were. Withinafew years many who had joined the Anglicans returned to the original church.

The disaffected Syrians were eager to maintain their connection with Antioch from where alone the bishops might receive legitimate consecration. Appeal to They refused to acknowledge Mar Diony-Antioch sius IV as their spiritual head in spite of state recognition and the support of the British Resident. Eleven times they petitioned the Patriarch praying for a metropolitan but received no reply. The standing comsubmitted in a final memorial. They said plaint was that they were as sheep having no shepherd. The Syrian Church was in a state of widowhood and its spiritual concerns were in a declining state. The Syrians generally were without the benefit of baptism, absolution, mass and other sacred rites. They added that having no Holy Oil, unsanctified oil was put into phials which before contained Holy Oil. These were great sins which were being committed. The memorialists therefore demanded that Mar Dionysius should be prevented from wantonly transgressing the canons of the church. In conclusion they begged the Patriarch to send them a duly consecrated metran, a man of character, learning and devotion.

The Patriarch replied:

"If possible we shall ourselves come, bringing you Bavas and Morone and the books you have written for and appoint Metrans and Priests and Deacons for you and regulate your Pallikramams......We have now heard that Metran creates Metran and Kathanar, Kathanar. This act is contrary to the Holy canons. For, our praiseworthy Lord Jesus Messiah conferred this great power on our Fathers, the Holy Apostles. He appointed them firstly as Deacons, secondly as Priests, thirdly as Episcopas, and fourthly as Patriarch. But they have to this day transmitted this great authority to their respective successors through generation after generation......Henceforth up to our arrival in your midst none of you hath authority to create a Deacon or a Kahana or an Episcopa."

At this time, when the Patriarch was exercising his mind on the selection of a proper metran, a young Travancorean, Mathai, a nephew of Abraham Mal-Mar Athanasius pan, who had received English education Metropolitan. at Madras, presented himself at Antioch. He was ordained as deacon, then as kassisa, subsequently as ramban and finally as metropolitan. Mathai who became Mar Athanasius returned to Malabar in 1843 as the Metropolitan of Malankara. "The appointment of this Mar Athanasius is an important event in the history of Syrian Church of Malabar," said the Royal Court of Final Appeal, "for, after repeated representations from the Syrian community who had been groaning under oppressions of various kinds and who had believed themselves to be spiritually lost, the Patriarch once more exercised his ecclesiastical authority to the great relief and satisfaction of the community. In their own words, 'they were again brought under a properly ordained shepherd'."

Mar Dionysius IV threw many an obstacle in the realisation of those hopes. His following was still considerable. Petitions and memorials poured in at Antioch complaining against the conduct and character of the new metran, charging him even with heresy. The British Resident whose help was sought by Mar Athanasius was not eager to help him in the assumption of office. Repeated applications

and reminders failed to enlist the Resident's support. At the same time the advent of one Mar Cyril who was sent by the Patriarch to enquire into the charges against Athanasius encouraged Dionysius to continue his resistance. Mar Cyril made use of the opportunity afforded to him and declared himself to be the metropolitan duly consecrated by the Patriarch. Mar Dionysius lent him his support, the motive being supplied by enmity to Mar Athanasius. Dionysius soon made over charge to Mar Cyril and requested the Resident to recognise his claims. Regarding this action of Mar Dionysius the Royal Court of Final Appeal has made the following observations:

"Feeling his ordination irregular and invalid and most unacceptable to the community; knowing that his cause was weak as against the nominees of the Patriarch to whom every body looked up as the supreme head of the Syrian Church, even though himself backed by the authorities and recognised by a Royal Proclamation; and unwilling to surrender his office to an opponent (Mar Athanasius), Mar Dionysius, at last, hit upon the idea of creating a Metropolitan of his own choosing, supported by false credentials and forged staticon. Mar Dionysius and his adherents who had not scrupled to do so many criminal and sacrilegious acts had not, however, the boldness and the unscrupulosity to deny the supremacy of the Patriarch and consequently the claim of his nominee. The reason of this is plain. The people, Mar Dionysius must have known, would, with one voice, condemn him if he did so. They were not prepared to go that length then and, therefore, under the pretended authority of the universally recognised Syrian Ecclesiastical Head, viz., the Patriarch, he had to work to defeat Mar Athanasius' claims".*

Things having thus assumed a complicated character, the Government of Travancore, on the advice of the Resident.

^{*} Second Appeal No. III of 1061.

appointed a committee in 1848 to enquire into the allegations of both parties. The committee The Quilon Comwas composed of four officers of government mittee including two Europeans. Mar Athanasius and Mar Cyril were directed to appear before them together with two kathanars and four principal parishioners of each of the Syrian churches to answer such questions as might be put. After examining the whole question the committee held that Mar Cyril had "lent himself to acts which no man of principles would be guilty of, thereby compromising his character and the dignity assumed by him". They repelled the grounds alleged against Mar Athanasius as being utterly unfounded. They proceeded to say that independently of his (Mar Athanasius,) staticon being unquestionable, his selection as a native of this country being in strict accordance with former precedents, it was but just and reasonable that Mar Athanasius should be recognised and proclaimed by the government as Metropolitan of the Syrian Church in Malabar.*

Unable to hold any longer, Mar Dionysius abdicated his thurch government in favour of Mar Athanasius. was followed by a proclamation by the Government of Travancore in these words: Mar Athanasius declared Metropolitan. "Whereas Mar Dionysius Metropolitan resident at Kottayam has resigned his dignity on account of old age; and whereas Mar Athanasius who has brought letters from Antioch for that dignity has been appointed as Metropolitan, it is hereby proclaimed: -That all comprising the Puthenkur Syrians in the Edavaka of Malankara should acknowledge the said Mar Athanasius Metropolitan and conduct themselves in conformity with past custom". Thus Mar Cyril was defeated in his attempts and the Patriarch's nomination of Mar Athanasius was eventually recognised. This was a clear victory for the party among the Syrians

[•] Second Appeal No. III of 1061.

who were in favour of the reforms suggested by the C. M. S. missionaries.

In 1849, while the committee appointed to enquire into the rival claims of Mar Athanasius and Mar Cyril was still in session, the Patriarch sent In re Stephanus. one Stephanus to support Mar Cyril. action of Stephanus caused further dissensions among the Syrians. On his entering the churches and preaching therein, a quarrel ensued and the Travancore authorities were obliged to interfere in order to suppress the disturbance. Stephanus was excluded from the churches, whereupon he complained to the Resident. But General Cullen declined to help him on the ground that he (Stephanus) had received no authority to preach in the churches within the territories of Travancore or Cochin. Stephanus took the matter to the notice of the Court of Directors.* The Board said that the Resident's action and the precedents on which it was based were against their express directions which enjoined strict neutrality on the part of their officers in India. It was pointed out that, "This is a matter the determination of which rests in the members of the Syrian Church alone and it is for them to recognise or not the pretensions of any ecclesiastic who may be hereafter sent into the country by the Patriarch of Antioch".

Mar Athanasius followed a vigorous programme of ceaseless work. Endowed with the spirit of reform and encouraged by his uncle, the new metropolitan threw himself heart and soul into the task of advancing reform with the help of a well-regulated educational policy. A printing press was established. Books were written both in Syriac and Malayalam on subjects educational and religious. Appeals were

[•] Agur says that the appeal was made by the Patriarch of Antioch at the instance of Stephanus.

issued to the churches for funds for the erection and maintenance of educational institutions, Mar Athanasius himself contributing a considerable sum of money. Expurgated editions of the Syrian liturgy were printed and circulated. The metropolitan addressed a letter to his churches to pursue the work of conversion, warning them against keeping true spiritual knowledge all to themselves. "He procured for the Christians of Travancore immunity from certain kinds of compulsory labour which the Sirkar had exacted from them, such as pounding rice for agrasālas* and supplying oil for festivals in the Hindu temples".† Thus the work of the C. M. S. missionaries was supplemented in ample measure by this reforming metropolitan.

The conservative party showed their disapproval of many of these measures and endeavoured to arrest the forces of change. Appeals were again made to Litigation the Antioch and the Patriarch granted their final solution. prayer sending Mar Koorilos Joyakim to reorganise the church in complete subservience to But he was not able to make any headway. In 1863, however, hope dawned on him. Accepting the instructions of the Court of Directors the Government of Travancore issued an order permitting Koorilos to open churches. Those who desired to become members of those churches were allowed to do so with impunity. Koorilos and his followers were prohibited to enter the churches under the control of Athanasius. In 1866 Joseph Kathanar, a follower of Mar Cyril who was appointed metropolitan by the Patriarch, also arrived in Malabar assuming the title of Mar Dionysius V. But nomination

^{*} Feeding houses for the Brahmans.

[†] Church History of Travancore, C. M. Agur, p. 140. These liabilities were not confined to the Christians at the time. What happened through the intercession of the metropolitan was that Christians were exempted.

and consecration by the Patriarch were not enough to enable the metropolitan to exercise his authority in Travancore. Recognition by the State had become indispensable to such exercise. The government could not brush aside its former decision upholding the claim of Mar Athanasius, the metropolitan then in power. Mar Dionysius contended that the Patriarch had dismissed Athanasius at the time of his own appointment. A decision was difficult as the order of dismissal was passed in a place so far away as Mardin. There was also the policy of religious neutrality emphasised by the Court of Directors. The government was glad to solve the difficulty by advising the parties to compromise their disputes or, in the alternative, to establish the right by filing a suit in the civil court. The attempt made by Mar Dionysius to get a declaration from the Madras Government also proved futile.

A new lever was soon applied to raise the importance of the reactionary party. Mar Ignatius Peter III, the Patriarch of Antioch, a man of strong will Patriarch visits and indomitable courage, was induced to Malankara. throw the full measure of his strength on the side of Mar Dionysius. The Patriarch resolved to resuscitate his authority which was fast declining on account of the spirit of independence which actuated the Syrian Christians of Malabar. He visited the place in June 1875. The visit having evoked public attention, the Secretary of State became alive to the necessity of advising the Government of India to maintain an attitude of nonintervention. The spiritual potentate saw the Governor of Fort St. George and the Mahāŕāja of Travancore.

The following proclamation was issued by H. H. the A proclamation. Mahārāja in 1876.

"Whereas by a proclamation dated 15th Karkadakom 1027, it was notified that Mar Athanasius has been appointed

following:-

to the post of metran of the Syrian Church by letter from Antioch; and whereas representations have been made that the patriarch of Antioch or his predecessor claims to have deposed the said Mar Athanasius and to have appointed another metran; this is to inform all whom it may concern that:—

"The former proclamation is not to be considered as in any way precluding the entertainment and decision by the ordinary courts of law, or any questions as to the rights in, or ownership to, any churches or property connected therewith, or as to the power of appointment or removal of officers connected therewith.

"With regard to all such matters and to any other disputes that may arise from the alleged deposition of one metran and appointment of another, the action of His Highness the Mahārāja's Government will be confined to the maintenance of peace and good order. Any apparent connection with appointments relating to the Syrian Church which proclamations issued under times and circumstances now altered may seem to indicate will henceforth be avoided.

"All parties will be clearly given to understand that they are to seek such remedies as they may deem themselves entitled to through the established courts of the country".

Naturally, church after church seceded from Athanasius and sought admission within the prevince of the Patriarch's benevolence. The Patriarch made his progress through various parts of

Mulanthuruthu. made his progress through various parts the country. Arriving at Mulanthuruthu in the Cochin State he presided over a mass meeting of his adherents. More than a hundred churches out of a total number of one hundred and eighty were represented at that meeting. The resolutions passed were the

- 1. "That the people of each parish should execute and register deeds of covenant, binding themselves to be subject to and never transgress the mandates of the See of Antioch; that they should be guided and controlled in all spiritual matters by the Apostolic See of Antioch, and that they should accept and be guided by books of Canons and rules prescribed by the Patriarch.
- 2. "That a fund, out of public subscriptions in their community, should be formed for the purpose of meeting the expenses of litigation, &c., to settle the disputes that had arisen between them and the followers of the opposite party as well as for the purpose of augmenting the common funds intended for the improvement of the community.
- 3. "That a committee known as the Syrian Christian Association should be established with the Patriarch as Patron and the Metropolitan as President to administer the fund as well as to regulate the affairs of the Church.
- 4. "That the Committee had full authority, subject to the supervision of the See of Antioch, to administer the Fund, to regulate the affairs of the Church and to alter the existing rules and frame new rules, &c.
- 5. "That the Committee should collect and remit Kassissa to the Patriarch;
- 6. "That the Metropolitan Mar Dionysius, as President of the Association, should carry on all litigation regarding religious and social matters of the church".

Before leaving Malabar the Patriarch divided Malankara which was till then a single diocese into seven dioceses and established the Syrian hierarchy. Making arrangements for taking the necessary legal steps against Mar Athanasius the Patriarch sailed home. Though the Athanasius party was strong at first, it gradually declined. With authority very much diminished Mar Athanasius ruled the diocese till his death in 1877. He was succeeded by his cousin, Mar Thomas Athanasius, whom he had consecrated in 1869.

The ban to the taking of legal action having been removed by the proclamation, Mar Joseph Dionysius filed a suit in the Travancore Court for the recovery of the seminary at Kōttayam and other properties of the church from the possession of Mar Athanasius. The suit terminated in 1889 in favour of the plaintiff. The court was composed of three judges. One of them, Dr. Ormsby, arrived at the conclusion that "it is not made out that imposition of hands by Antioch is essential to the consecration of a Metran of Malankara, which is itself an independent and coeval church."

The majority of the Court, Krishnaswamy Rao and Sitharamaier, JJ., found:—

- 1. "That the ecclesiastical supremacy of the See of Antioch over the Syrian Church in Travancore has been all along recognised and acknowledged by the Jacobite Syrian community and their Metropolitans;
- 2. "That the exercise of that supreme power consisted in ordaining, either directly or by duly authorised delegates, Metropolitans from time to time to manage the spiritual matters of the local church, in sending Morone (Holy Oil) to be used in the churches in this country for baptismal and other purposes and, in general supervision over the spiritual government of the church;
- 3. "That the authority of the Patriarch has never extended to the government of the temporalities of the church which, in this respect, has been an independent church:
- 4. "That the Metropolitan of the Syrian Jacobite Church in Travancore should be a native of Malabar consecrated by the Patriarch of Antioch or by his duly authorised delegates and accepted by the people as the metropolitan, to entitle him to the spiritual and temporal government of the local church."

Many other suits followed regarding nearly every one of the individual churches. Almost all these suits

including the interpleader suit filed by the Secretary of State terminated in his favour and Mar Dionysius thus became the recognised Metropolitan and assumed the management of the Malankara Church.

Thus the split among the Puthenkur Syrians became permanent. The majority party under Mar Joseph Diony-

sius acknowledged the supremacy of the Jacobite Patriarch of Antioch. They adhered to the beliefs and practices of the Church as they existed prior to the arrival of the missionaries. The other party organised themselves under Mar Thomas Athanasius. They did not acknowledge the authority of any foreign prelate. They showed a determination to accept the reforms suggested by the missionaries and

were known by the name of the Reformed Party. They are

"The adherents of the Mar Thoma Church", says Mr. P. Cheriyan,* "contend that theirs is the true successor of the Apostolic Church founded by St. Thomas and that by throwing away what they regard as.......the superstitious beliefs and practices.......that crept into the church as the result of its connection with Rome and Antioch, the ancient Church of Malabar as represented by them has been restored to its Scriptural and Apostolic purity. Their opponents, on the other hand, say that it is they that represent the ancient Syrian Church. Though these latter have not quite ceased to style themselves Jacobite Syrians, they show a preference for the designation, Malapkara Syrians or Orthodox Syrians." †

He continues:

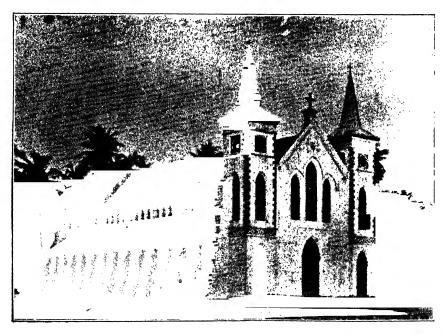
now called the Mar Thoma Syrians.

^{*} The Malabar Syrians and the Church Missionary Society, P. Cheriyan, pp. 299-300.

[†] The name Malankara Syrians or Orthodox Syrians has recently been accepted by 'the Catholicos' Party' of the Jacobite Syrians. The party that follows the Patriarch of Antioch styles themselves as 'the Malankara Jacobite Syrians.'



Mar Thoma Church, Maraman.



Jacobite Syrian Church, Niranam.

"In external matters, the Jacobite and the Mar Thoma churches resemble each other very closely. In the architecture of their churches, in the garb of their priests and bishops, in their insistence on their bishops being celibates, in the observance of the great Christian festivals according to the calendar of the eastern churches, in rejecting the filoque clause, in retaining the practice of noncommunicating attendance, in the use of can'lles, incense, vestments, and, to a considerable extent, even in the language of their liturgy as well as in several other matters, the two churches closely resemble each other. But in regard to matters of faith and doctrine, they differ considerably. The teaching of the Mar Thoma Church very nearly approaches to the evangelical churches of the west. On the other hand, the teaching of the Jacobite church approximates to that of Rome. In the matter of church. government, the Mar Thoma Syr ans are developing a decidedly democratic constitution which, while giving the laity a considerable voice in the administration of church matters, places certain important restrictions on the powers of their bishops and the clergy. The Malankara Syrians also are struggling with a view to obtain a democratic form of government, but hitherto, their endeavours to curb the towers of their bishops and the patriarch do not seem to have been crowned with any great success. Notwithstanding the great difference between the two churches in matters of faith and doctrine, it is no uncommon thing to come across laymen and even priests who have been changing sides more than once."

Later History of the Jacobite Syrians.

After the Royal Court Judgment of 1889 the church began to prosper. Mar Joseph Dionysius set himself to work in effecting reforms. Instruction in Syriac was carried on efficiently in the old seminary at Köttayam. Schools

were opened for the teaching of English and Malayālam. Gospel work also went on satisfactorily. Several new churches were built and many old churches repaired. In fact, the church was in a very flourishing condition materially and spiritually for a period of twenty years.

Mar Joseph Dionysius passed away in 1909. Geevarghese Mar Dionysius who was consecrated at Jerusalem as metropolitan in the previous year looked after the duties of the Malankara Metropolitan by command of the Patriarch Abdel Aloho II who was then in London on his tour to Malabar. He convened a meeting of the managing committee of the Syrian Christian Association and got certain resolutions passed. He was given considerable powers in the management of the church properties.

The Patriarch arrived soon after. He stayed in this country for about two years. Complaints were made to him charging Mar Dionysius with mis-'Arrival of the conduct, disrespect to the Patriarch, and Patriarch. arbitrary management of the properties and revenues of the church. The Patriarch enquired into those charges and excommunicated him. He also consecrated Paulose Mar Athanasius and Geevarghese Mar Severius as metropolitans. He convened a synod in the same year at Alwaye and laid down the necessary constitution for the management of the church on the lines of the Mulanthuruthu Synod of 1876. Mar Koorilos was appointed Malankara Metropolitan with power over the dioceses of Kottayam, Niranam, Thumpamon, Quilon and Kandanad, and Paulose Mar Athanasius over the dioceses of Cochin and Angamale. The churches of the Southists were formed into a separate diocese and placed under Geervarghese Mar Severius.

After the Patriarch's departure, Abdel Messiah who was formerly the Patriarch of Antioch also visited Malabar.

He instituted a Catholicate in Malankara, and the old metropolitan Mar Ivanios was made the first Catholicos in 1912. Three metropolitans, Joyakim Mar Ivanios, Geevarghese Mar Philoxinos and Geevarghese Mar Gregorius were consecrated. Mar Dionysius did not take part in these consecrations. The Catholicos lived only for seven months.

In 1913 the Secretary of State for India in Council filed an "Inter-pleader-suit" in the Trivandrum District Court.

The Interpleader Geevarghese Dionysius and his co-trustees, and defendants 4 to 6 Mar Koorilos and his co-trustees. While the suit was pending, Mar Koorilos died in 1917 and Paulose Mar Athanasius was appointed Malankara Metropolitan in his stead. The lower court decided in favour of Mar Geevarghese Dionysius and his co-trustees but the judgment was reversed in appeal by the High Court. (A. S. 68 of 1096). The main questions involved in the case were:

- 1. The powers of the Patriarch of Antioch to ordain and excommunicate metropolitans;
 - 2. The validity of the excommunication of Geevarghese Dionysius: and
 - 3. The version of the canon law that has been accepted in Malankara.

A full Bench of the High Court decided,*

- 1. that the Patriarch of Antioch possesses the power of ordaining and excommunicating episcopas and metropolitans by himself, i. e., in his own right, and that it is not necessary for him to convene a synod of bishops and proceed by way of synodical action in order to enable him to exercise those powers;
- 2. that the excommunication of Geevarghese Dionysius was valid, and

^{* 10}th Minam 1098/23rd March 1923.

3. that Exhibit 18* and not Exhibit A† is the version of the Canon Law that has been recognised and accepted by the Malankara Jacobite Syrian Church as binding on it.

In the same year (1923) Mar Geevarghese Dionysius went to Mardin to see the Patriarch Elias III of Antioch with the idea of getting the order of excommunication cancelled. The Patriarch deputed the Metropolitan Mar Julius to enquire into and report on the matter and to see if peace could not be restored. The adjustment of differences was found to be difficult.

The Catholicos party got Philoxinos ordained as Catholicos under the title of Mar Basselios II in 1925. Rev. P. T. Geevarghese Kathanār was consecrated episcopa by the Catholicos. The same year the Metropolitan Joyakim Mar Ivanios died. In 1926 the Patriarch's party got two metropolitans Michael Mar Dionysius and Thomas Mar Dioscorus consecrated by Patriarch Elias III at Jerusalem. Michael Mar Dionysius was appointed over the dioceses of Kōttayam, Niraṇam, Thumpamon and Quilon and Mar Dioscorus over the Knanaya diocese on the death of Mar Severius. Mar Timotheus was consecrated as metropolitan by the Patriarch in 1927 at Jerusalem and was appointed over the diocese of Kanḍanāḍ.

On a review petition presented by Mar Geevarghese Dionysius the High Court held that his excommunication was invalid because the principles of natural justice were not complied with.

After the judgment the gap between the two parties grew wider. Basselios II died in 1928 and Basselios III, the present Catholicos, was consecrated in 1929. He made Geevarghese Episcopa a metropolitan and consecrated two episcopas, Kuriakose Mar Gregorius and Jacob Mar

^{*} Canon produced by the Patriarch's party.

[†] Canon produced by the opposite party.

Theophilus. In 1930 Geevarghese Mar Ivanios Metropolitan and Mar Theophilus Episcopa left the Jacobite faith and joined the Roman Catholic Church. The Metropolitan Mar Eusthatius, delegate to the See of Antioch, died in the same year.

The Patriarch Elias III visited Malankara in 1931. The order of excommunication passed against Mar Geevarghese Dionysius by Patriarch Abdella was cancelled. This however did not bring peace in the community. The Patriarch refused to recognise the Catholicate in Malankara. He died in 1932 at Manjinikkara in Pathanamthittay where his body was interred.

Mar Geevarghese Dionysius also died two years later. Geevarghese Mar Basselios Catholicos was elected Malankara Metropolitan by the Catholicos' party. The metropolitan on the Patriarch's side convened a meeting of the church representatives in 1935 at Karingachira church in the Cochin State. In that meeting, Poulose Mar Athanasius, Metropolitan of Angamāle and Cochin, was elected as the Malankara Metropolitan by the Patriarch's party and in accordance therewith the Patriarch Mar Ignatius Aphreme I issued the order of appointment.

The Jacobites number 3,37,882 souls according to the census of 1931.

Later History of the Mar Thoma Christians.

Though removed from the metropolitanship of Malankara by decree of court, Mar Athanasius was able to retain the support of considerable numbers. But he died not long after in 1893 and was succeeded by his cousin Rev. Titus Kathanār. The consecration was performed by the Bishop of Tholiyūr. Soon after, disputes arose between the reformed Syrians and the missionaries. The conduct of the Mar Thomites in admitting to their fold a member of the Anglican congregation suspended by the Church Mission authorities for breach of church discipline, ran counter to

the policy of mutual help. It was viewed with great displeasure by the mission authorities who took it as an indication of the hostility of the new Syrian metrans against them. Bishop Speechly intervened and effected a peaceful settlement.

Titus held office for nearly sixteen years and died in 1910 leaving the affairs of the church in the hands of Titus Mar Thomas II, his suffragan. He continues to govern the church assisted by a suffragan. The Mar Thoma Syrians celebrated the centenary of their reformation in 1936.

The metropolitan is the supreme head of the Mar Thoma Church. He is also its chief executive functionary. He has under him three bishops who are in charge of the three dioceses into which the metropolitan province is The metropolitan is assisted by a council elected by the church assembly which is the legislative body of This assembly consists of representatives the church. from the parishes as well as all clergymen and bishops. The metropolitan has the right of vetoing the decisions of the assembly. The church has a number of institutionshospitals, poor-houses, schools and missionary organisations. These may be grouped under three heads: those under the Metropolitan in Council, those over which he has only powers of supervision, and those which are under the management of independent parishes.

The Mar Thomites number 142,456.

Further History of the Catholics.

By the end of the 17th century the Portuguese lost their power completely in the east and with that the protection given by them to the Christians under their control also declined. But the Pope was equal to the occasion and was glad to bear the entire responsibility for the protection of the churches. Contrary to usage he sent bishops and

missionaries independently of Portugal. The Portuguese, however, opposed the policy and continued to nominate their own bishops. This led to disputes which disturbed the peace of the Catholic church for more than a century.

In the first quarter of the 18th century there were on the Malabar coast three centres of Roman Catholic authority. Strand authority bishops appointed by Rome as the Vicars-Apostolic of Malabar who were en friendly terms with the Dutch, wielding great authority over the Catholic churches. There were the Portuguese bishops of Cochin and Crānganore commanding very little influence. They had under them the churches in south Travancore.

In 1712 Bishop Angelus Francis, the Vicar-Apostolic, He was succeeded by John Baptist who was in turn succeeded by Bishop Florentinus in 1750. The Carmelites The Mahārāja of Travancore who at this at Varāpula. time was extending his territories northwards was friendly to the Carmelites. He paid a visit to Varapula accompained by General D'Lannoy. He exempted the properties of the mission from the payment of land taxes. European missionaries visited the various churches in the diocese, regulating the work of the priests and inspiring confidence by their ministrations. The native clergy were said to be ignorant and inefficient. On the death of Florentinus in 1773, Bishop Francis, a Bavarian, was raised to the episcopate. This led to friction, for the Carmelites were Italians by nationality. Bishop Francis was constrained to retire. His successor, Bishop Charles of Bombay, did his best to establish a friendly relationship but without success. The next Vicar-Apostolic of Varapula was Bishop Louis who held office from 1785-1802, a period of very bitter dispute with the Romo Syrians,

The opposing

During all this time the Portuguese bishops wielded little authority. Their following was small and the Vicars-Apostolic of Varapula had extended their Jesuits at Crānga-nore and Cochin. jurisdiction over the churches in Cochin and Cranganore. In the latter place Ribeiro, the Jesuit bishop, was succeeded by Don Antonio Pimental in 1722. The Carmelites gave him much trouble and even refused entrance into his bishopric. But things changed for the better in 1756, when Bishop Salvador of the Society of Jesus became the Archbishop of Cranganore. He came to an understanding with Florentinus, the Carmelite Vicar-Apostolic and was thereby enabled to win over all Christians who liked to remain under his ministration. But the good intentions of Salvador did not bear any fruit, for during his time and that of his successors the Jesuits had fresh difficulties to face. The supply of funds from Europe had ceased. In 1759 the Jesuits had to leave Portugal and fourteen years later the Society of Jesus was dissolved. In 1786 a Syrian priest, Thomas Paremakal, was appointed administrator of the diocese of Cranganore. Paremakal fixed his headquarters at Ampalakada, which soon attracted large numbers of anti-carmelites. They met at Ankamali and passed resolutions charging the missionaries with unchristian acts and heinous crimes. They resolved to have one of themselves as their bishop and elected Paremakal. Carmelites were all this time carefully watching the turn of events in the diocese. They ingratiated themselves into the favour of the ruling princes and obtained an order from the Mahārāja of Travancore granting full liberty to all the Roman Catholic churches to obey either the Vicar-Apostolic of Varapula or the Archbishop of Cranganore as they chose. This enabled them to take possession of the Portuguese churches. Col. Macaulay, the British Resident, also favoured them. The efforts made by Paremakal to be consecrated bishop thus proved futile. But he continued to be

the administrator till his death all the same.

faction obtained additional strength from the defection of Pandari Paulo to their side.

A reconciliation was effected through the intercession of Mathoo Tharakan. Many Carmelite churches went over to that side. But dissensions soon Carmelites regain arose within the party which made Paulo strength. unpopular. The churches in the Cochin territory as well as those under the Vicar-Apostolic refused to recognise him as their metropolitan. Even Mathoo Tharakan seceded with a large following and openly acknowledged the authority of the Carmelites. The Carmelites thus regained their lost prestige and the deserters began to flock to them. At the time of Buchanan's visit the Vicar-Apostolic had under him 64 churches, while the Archbishop of Cranganore had only 45. A few years later the power of the Portuguese Archbishop diminished still fur-He had only 18 churches under him.

In 1827 Bishop Stabilini was appointed Vicar-Apostolic of Varapula. He attempted to add to the number of his flock by converting the fishermen on the Disputes continue. coast and admitting some of them to holy orders. This raised great opposition. He was succeeded in 1831 by Bishop Francis Xavier who also found his position rather insecure on account of the enmity of his own flock aggravated by the pretensions of the king of Portugal to patronage over the missionary enterprise in India. But he was able to settle disputes and extend his influence by dint of character and piety. With him began a new era in the history of Roman Catholicism in Travancore. He encouraged the Syrian Carmelite congregation. But the old differences assumed serious proportions which threatened the integrity of the Catholic church. Bishop Xavier issued an order prohibiting all connection with the Portuguese ecclesiastics. Many threw off their allegiance to the

Portuguese bishops, placing themselves under the Vicar-Apostolic. This led to great commotion. The British Resident was appealed to, but Colonel Fraser refused to interfere. About this time, the Portuguese were put to further difficulties by the dissension in the churches in south Travancore caused by the aggressions of Halicarnassian missionaries who attempted to place the Roman Catholic churches there under French jurisdiction.

In 1838 a papal Bull was circulated by Propaganda, which placed the whole of Malabar including Cochin and Cranganore, the seats of Portuguese autho-The Carmelite rity, under Bishop Xavier, the Vicarscare. Apostolic. Thus he became the sole rightful authority for the whole of Malabar. Bishop Neves, the Portuguese administrator of Cochin, though a Catholic. condemned the Bull as surreptitious and even questioned the power of Rome to interfere. He made all efforts to oppose the operation of the Bull. However, Bishop Xavier succeeded in capturing many churches from the Portuguese. Seeing their position quite unsafe, the Portuguese ecclesiastics appealed to the Travancore and British Governments for protection from the Carmelites. The Vicar-Apostolic also applied to the authorities to get a declaration to the effect that he was the only lawful superior of the Catholics of Malabar. At that time the ecclesiastical governor of Cranganore died without appointing a The Vicar-Apostolic took advantage of this successor. critical state of affairs and won over many Portuguese Matters came to a crisis in 1840. The Government of Travancore did its best to maintain peace and order. The British Government declared their policy of non-interference. Bishop Neves and his party became helpless. Many abandoned the sway of the Portuguese and submitted to the jurisdiction of the Vicar-Apostolic.

Xavier was succeeded in 1844 by his co-adjutor, Bishop Louis of St. Theresa. The quarrels continued. The efforts of the Pope to adjust differences proved unavailing. The Metropolitan of Goa, helped by his administrators in Crānganore and Cochin, still pretended to exercise authority over the affairs of many churches under the Vicar-Apostolic. The Pope protested against this action of the Metropolitan and recalled him to Europe. But it had no effect on the Portuguese ecclesiastics and their co-adjutors in Malabar. They continued their opposition towards the Carmelites and their supporters. But all hopes of their success were soon frustrated by the death of Bishop Neves in 1849.

In January 1852 Bishop Louis, the Vicar-Apostolic, proceeded to Rome to inform the Pope about the troubled state of affairs in the Malabar churches. The Concordat and its failure.

The labours of the Vicar-Apostolic in Rome led to the Concordat of 1857. It re-established the authority of the king of Portugal to appoint ecclesiastics in Malabar. The bishops appointed by the Pope were to be gradually withdrawn. But no good came out of this on account of the opposition of the Carmelites.

The new Vicar-Apostolic Bernardino was a strong man deeply attached to his faith and anxious to improve the condition of the church. The prime cause of degeneracy according to him was the tendency of the priesthood to become hereditary. Domestic seminaries led to nepotism and corruption. As soon as a malpan died one of his nephews took possession of his library and started training candidates for the priesthood. This practice being found to be detrimental to the true interests of the church, Bernardino limited the authority to train priests to the seminary of Elthuruthu, Vāļakuļam, Mānnānam and Puthenpaļļy. The reforms of Bernardino, however, were treated with derision by the Romo Syrians.

They had already begun to dislike the authority of the Latin bishops of the Carmelite mission and were asking for Chaldean bishops.

Fr. Thondanattu Antony who led the opposition made overtures to the Patriarch. He proceeded to Baghdad at the head of a party of his followers and Rocos and Mellos. succeeded in bringing with him a Chaldean bishop, Thomas, otherwise known as Mar Rocos, (1861). He was to be the metropolitan and commissioner over the Roman Catholic Chaldean Syrians of Malabar, Rocos obtained some following among the Romo Syrians, but his coming to India was severely denounced by Rome as a breach of ecclesiastical discipline. A contest between Rocos and the bishop of Varapula necessitated the interference of the Resident. Rocos was obliged to return home. But the departure of the bishop from India did not put an end to the movement. A party among the Romo Syrians were persistent in getting a Chaldean bishop. Disputes touching the authority of the Patriarch over the Malabar churches led to serious conflict. The party which desired to have an oriental bishop gained a steady accession of strength. Thondanattu Antony was put forward as a candidate for the episcopate. Once again he crossed over to Baghdad, this time to obtain consecration. Fear of Rome persuaded the Patriarch to refuse his request. But Antony succeeded in getting himself consecrated by the Nestorian Patriarch. On his return to India he took the name of Mar Abedjesus. But he did not hold his position long. He submitted to Varapula and contended himself with working as an ordinary priest. The efforts of the Chaldean Patriarch to secure independent control over the churches in Malabar went on without intermission. But seeing that there was no hope the Patriarch Joseph VI ordained Mar Elias Mellos as the Bishop of Malabar in 1874. This was done at the request of certain priests of the Padroado

jurisdiction. However, the Pope soon suspended Mellos from his office and ordered his excommunication. Bishop Mellos and Thondanāṭṭu Antony joined hands in opposition to Rome. Some years later Mellos fixed his headquarters at Trichūr and the Patriarch himself was obliged to make his formal submission to the Pope. Threatened with excommunication by the Pope the Patriarch recalled Mellos. Mellos left India in 1877 leaving Mar Abedjesus and a chorepiscopus in charge of his adherents at Trichūr. Mar Abjedjesus and his followers continued their independence, describing themselves as the 'Independent Syro-Chaldeans of Malabar'.

The Catholic church had now grown unwieldy. The Vicar-Apostolic of Varāpula, Leonard, the successor of Bernardino, found it necessary to associate with him a co-adjutor for the governance of the Romo Syrians. He thought that the Latin Catholics would form a sufficient charge for himself. So in 1877 Bishop Marcellinus was appointed co-adjutor and he was to govern exclusively all the Syrian Catholics of Varāpula. This bishop did good work. But his literary ambition cost him his popularity, for in a history of the Syrian church in Malabar he rejected the Romo Syrian tradition of perpetual adherence to Rome. In 1886 he was relieved of his charge as co-adjutor.

In the same year occurred a great change in the constitution of the Catholic church in India. On June The new Concordat.

23rd a new Concordat was signed between Pope Leo XIII and the king of Portugal.

"This concordat", says Agur, "apparently closed half a century of fighting and brought about a happy termination to a long standing dispute which had dragged its weary course along, through several generations not without serious and mischievous consequences, schisms and scandals."* As a

^{*} Church History of Travancore, Agur, p. 361.

result of the concordat a Roman Catholic hierarchy was established in India. In May of the same year there was a general division of the churches by a papal Bull. By this the churches of the Latin and Syrian rites were separated into different units and special arrangements were made regarding their administration. The Latin churches of the coast were placed under the Bishop of Cochin and those of the interior under the Archbishop of Varāpuļa and his suffragan, the Bishop of Quilon. The Syro Roman churches of Varāpuļa and Crānganore were divided into the Vicariate-Apostolic of Kōttayam and Trichūr and placed under Lavinge and Medlycott, two Latin Vicars-Apostolic. Thus the Varāpuļa Vicariate-Apostolic of the Syrians which is the oldest Vicariate-Apostolic of Malabar became a Latin Vicariate-Apostolic.*

When the Protestant missions attained an important position in the various provinces of India, the authorities at Rome also decided to safeguard their interests and advance their own missionary effort. Hitherto the Roman Catholic bishops in India were foreigners. They were legally not bishops but only officers of the church who exercised authority without the sanction of laws with its due forms. They were titular bishops whose sees were associated with foreign lands. This being found to be a grave defect, the Pope resolved to create territorial bishoprics in the sanctioned manner.

The Concordat, though it was satisfactory to the Portuguese, was viewed with repugnance by the British Catholics. They apprehended that the Portuguese power in India was receiving strength under the cloak of religion. Many Catholics, mostly converts from the Bharathar community, protested against the Pope's efforts. Guided

^{*} Syrian Church of Malabar, Rev. Dr. Placid, p. 57.

by their able leader Fr. Julius Alvares, they broke away from the Roman Catholic communion calling themselves the 'Independent Catholics'. They went over ultimately to the Catholic Patriarch of Antioch. Alvares fixed his head-quarters in Ceylon. In 1895 Soarez, the superior of the 'Independent Catholic Mission', was deputed from Ceylon to Travancore to help the Independent Catholics who were being troubled by the Jesuits and other clergy. He established himself at Nagercoil and began a scheme of constructive work. But as the other sections of Christians protested against Suarez the Travancore Government interfered and ordered him to close his chapel.*

The arrangements of 1877 lasted till 1896 when Pope Leo XIII again divided the Vicariates-Apostolic of Köttayam and Trichūr into three, namely Further division those of Changanāśśēry, Erņākulam and of the dioceses. Trichur, and entrusted them to Indian Syrian Vicars-Apostolic. The Vicar-Apostolic of Changanaśśery, Mar Mathew Makil, was a Southist. The Northists therefore resented his appointment since they were never before under a Southist prelate and continually petitioned Rome for a Vicar-Apostolic of their own section. Accordingly in 1911 Pope Pius X appointed Mar Thomas Kurialachērry as Vicar-Apostolic of Changanāśśery. The Pope erected a new vicariate-apostolic for the Southists of Changanāśśery and Ernakulam over which he placed Mar Mathew Makil.† In 1923 Ernākulam was made the Metropolitan see of the Catholic Syrians with Trichur, Köttayam and Changanāśśēry as suffragan sees. Seven years later the Pope decreed the division of the archdiocese of Varapula, erecting with a part thereof the diocese of Vijayapuram, and entrusted it with the Carmelite order, while the archdiocese was placed under the care and charge of

^{*} Church History of Travancore, Agur, p. 408.

[†] The Syrian Church of Malabar, Rev. Dr. Placid, p. 57.

Indian clergy. In 1937 the diocese of Quilon was divided and the new diocese of Trivandrum was created for the Latin Catholics.

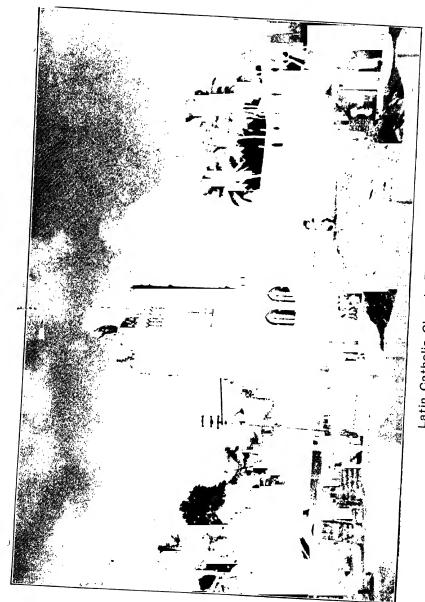
The Latin church uses Latin as the language for all its religious ceremonies and the Syrian church the Syriac language. Thus there are in Travancore different rites in the Roman Catholic church offering the sacrifice of Mass in two different languages. In doctrine and teaching there is no difference between the Syrian and Latin rites. It is only for convenience of administration and for historical reasons that the Syrian rite and the Latin rite are under different governments.

The Romo Syrian church of the Chaldean rite in Malabar is divided into the bishoprics of Trichūr, Ernākuļam, Kōttayam and Changanāśśēry. The Archbishop of Ernākuļam is the head of the hierarchy. The Roman Catholics of the Latin rite are under the bishoprics of Kōttār, Trivandrum, Quilon, Vijayapuram, Varāpuļa and Cochin. Of these the Cochin diocese is supervised by the Archbishop of Goa known also as the Patriarch of the East Indies. The other Latin dioceses are governed by the Archbishop of Varāpuļa. Both the Syrian and Latin churches are ultimately under His Holiness the Pope of Rome. In both the sections of Catholics there are sub-divisions. The Seven Hundred and Five Hundred form the main sub-divisions among the Latin Catholics. Among the Romo Syrians there are two called the Nordists and Suddists.

The Romanists, according to the census of 1931, number 8,90,390 and form 50.4 per cent. of the total Christian population. Of these the Romo Syrians number 4,49,173.

The Malankara Syrian Church.

Since the separation of the Syrians into the Puthenkūr and the Palayakūr communities, occasional attempts



Latin Catholic Church, Trivandrum

were made by a section of the Jacobites to place themselves under the sway of Rome. Mar Dionysius Accepts supremacy in the 18th century, for example, approachof Rome. ed the Pope with a request to receive them into his communion. In November 1926 Mar Ivanios, the Metropolitan of Bethany, wrote to the Pope Jacobite requesting that himself and his followers might be taken in. The Pope responded them most sympathetically and assured that he would allow the continuance of the Antiochian Syrian rite and that the bishops would be kept in their offices. Accordingly, Mar Ivanios and his associate Mar Theophilus accepted the supremacy of the Pope. In the presence of the Syrian Catholic Bishop of Changanāśśēry, and the Latin Bishop of Köttar Bishop Benziger, the Latin Bishop of Quilon, received their profession of faith, absolved them from censures and irregularities, and received them into the Catholic church in 1930. They and their followers adhere to the Syrian rite of the Jacobites with some modifications.

In 1932, Mar Ivanios was made titular Archbishop of Phasia with his residence at Trivandrum and Mar Theophilus titular Bishop of Arad with his residence at Thiruvalla. A new hierarchy was established for them with Trivandrum as metropolis and Thiruvalla as suffragan see.

According to the census of 1931 they number 7,660.

The Protestant Church.

Protestant missionary enterprise traces its beginnings in India to the early years of the 18th century, when the Early attempts.

Danish Mission secured their footing in Tranquebar. The Danish missionaries entertained the idea of a union with the Malabar Syrian Christians. But the Dutch chaplain at Cochin who was consulted discouraged the idea as hopeless. A few years later the missionaries made overtures to Mar Thomas IV, the Syrian Metropolitan of Malankara. This attempt also proved unsuccessful. But the English

missionaries, who by this time had established themselves firmly in several centres in India, took advantage of the sympathy of Col. Macaulay, the British Resident in Travancore and Cochin, to establish Protestant churches in both the states. Thus the London Mission and the Church Mission Societies succeeded in gaining a footing in the country with the help of the government. Towards the close of the century other Protestant missions also opened centres of work and gained several followers.

The London Mission Society.

The London Mission Society is now one of the constituent bodies of the South India United Church. was the first Protestant organisation to Ringeltaube. attempt proselytism in Travancore. The mission started work in 1806. Even before that time stray attempts had been made by missionaries of the Tanjore and Tinnevelly missions to gain converts. It was then that a Hindu family at Mylady embraced the faith. 1806 Ringeltaube, of the London Mission Society, arrived in Travancore. Col. Macaulay, the British Resident, promised to 'procure' from the raja permission for the purchase of land's and for the erection of a church for the Protestants of Mylady. Not only was the promise fulfilled but he offered his own personal contribution towards this object. The Mahāŕāja himself undertook to point out the site for the construction of the church. In 1809 the church was constructed under the supervision of the government officers according to instructions from the Resident and the approval of the Mahārāja. In 1810 the government granted permission to build six more churches and rendered substantial help in their construction. For a short time Ringeltaube had to suspend his activities in Travancore owing to changed political conditions. He removed his residence to Palamkottah on the other side of the ghats and worked for 'the Society for the Propagation of

Christian Knowledge' which had firmly established itself in Tinnevelly.

During this period Vedamanickam who became a Christian was doing propaganda work in and around Mylady. He was strong in his nascent Christianity and publicly prayed that Travancore should pass over to the East India Company. To this attitude, however, Ringeltaube gave no encouragement. As a German he could not subscribe to a desire to see the British power still further enhanced. His answer was significant and showed that the converts to Christianity in Travancore were at that time happier than those in British India. "The country you live in," said he, "is a charitable country. There are some privileges here, which the subjects under the Company's government do not enjoy. If the Company were to rule this land, perhaps you will have to pay them more than you do now here. Apart from this, it is an improper request to ask God to give your country into the hands of the Company; You will be more reasonable in your request if you will only pray, 'O Lord convert the Maharaja of our country to Thy knowledge and grant that all his subjects in this land may worship Thee and come under Thy rule"...* Ringeltaube preached in several villages, distributed copies of the scriptures and made steady endeavours to spread the faith. He advocated the use of the language of the country for "it is in vain", said he, "to print and distribute the Bible if there are none to read it". He made some effort at converting the Catholics to the Protestant faith but with little success.

Col. Munro, the British Resident, was an ardent supporter of the Missionary Society. In 1813 the mission-favours from aries obtained through his influence sixty-munro.

eight Kōttas of paddy land at a reduced tax which itself was still further reduced a few years later at the instance of Rev. Mead. Munro wrote to Ringeltaube

[•] Church History of Travancore, C. M. Agur, p. 547.

in 1814 that he had stipulated with the Dewan to exempt his followers from the capitation tax. He also sent instructions to the Sarvādhikāriakkār to ascertain the number of his followers. If the Resident wanted the information for his own sake, he could well have ascertained it from Ringeltaube himself, but Munro was always anxious to enhance the prestige of the missionaries in the eyes of the Travancore officers. "He was," says Rev. Mateer, "all powerful in political matters. He greatly favoured the mission and used his influence on its behalf".* Ringeltaube left Travancore in 1816. The ten years of his missionary work may be regarded as the first period in the history of the mission in Travancore.

Mead who was sent to continue the work done by Ringeltaube fixed the headquarters of the mission at Nagercoil in 1818. The Rance granted a bungalow there for the missionaries to reside and Rs. 5,000 for the purchase of lice-fields as an educational endowment, from the income of which the English Seminary, established in 1819, has since been supported. Munro succeeded also in securing for the mission a good amount as donation from the raja of Cochin. He appointed Everrett and then Mead as judges of the court at Nagercoil in order to make an impression upon the world of the importance of the It is said that when Mead daily went to missionaries. the court in his palanquin, his chief ministerial officer Pākkianāthan, a convert, rode on horse-back closely following him to the court house,† This had the desired effect. The appointment of a missionary as a judge was so incongruous with the principles of the Society that the mission authorities disapproved of the arrangement. Mead was therefore obliged to resign the office after holding it for nearly one year. In 1820 the missionaries established a printing press at Nagercoil, and the Travancore Rani's Government

^{*} The Land of Charity, Rev. S. Mateer, p. 267.

[†] The Church History of Travancore, C. M. Agur, p. 659.

passed an order that all articles of stationery imported from foreign places for the use of the press might be delivered to the missionaries duty free. A seminary for the training of native youths was also established in the same year. The temporal blessings which Christianity conferred in the shape of education and the chances of worldly preferment were greatly appreciated.

In 1820 a missionary centre was established at Quilon. The mission was divided into two ranges, Tamil and Malayalam. Within four years the Quilon Rapid progress. branch was able to start ten schools. missionaries in the south also devoted their attention to the cause of female education and the encouragement of the manufacture of lace. Not long after, a modification was effected in the Tamil mission in consequence of the visit of a deputation from the Society. The mission was divided into two districts, the western and the eastern, with Neyyūr as the headquarters of the former, while Nagercoil continued to be the headquarters of the latter. A Nayar family in Neyyūr gave a site for the erection of the mission buildings. In 1828, by a resolution of the district committee of the mission held at Madras the mission stations of the Society in Travancore, which were till then under the jurisdiction of the district committee at Madras, were placed under a separate committee transacting business independently.

Hearing of the good social work done by the missionaries the Mahārāja paid a visit to the important mission centres in 1834. He also gave large sums of money as donation to the church at Nāgercōil. Four years later the society obtained from the Mahārāja "through the influence of General Fraser, the British Resident," permission to open a station at Trivandrum. The Mahārāja also gave a plot of land on which

buildings were soon erected. "It is interesting to learn, says Rev. M. A. Sherring * "that in a large English school established in Trivandrum entirely under the patronage of the Raja and at his expense, the Bible was introduced and taught. The Raja expended £25 on the purchase of a stock of Bibles for the use of his school."

In the same year new missionaries came from England and the work of the mission was extended. Dr. Ramsay commenced medical mission work at Neyyūr. Certain disputes. It facilitated the spread of the Gospel by enabling the preachers to come in contact with the people. In 1856 certain disputes arose between the converts and their former masters. The converts were chiefly from the backward communities who were generally the tenants and labourers of the high caste Hindus. refused to perform the time-honoured 'ulium' services. The high caste people resolved to hold themselves out in defence of time-honoured customs. The missionaries possessed great influence and rendered all help to their followers. The disputes culminated in the disturbances relating to the dress trouble the details of which are narrated in the next volume.

The work of the London Mission Society bore rich fruit not merely in securing large numbers of converts but also in raising the morale of the lower classes and in setting them on the road to increased prosperity. An Indian pastorate was organised on a sound and permanent basis and in 1866 some of the evangelists were ordained as pastors. In 1873 the Mahārāja gave grants-in-aid to the schools of the mission. The mission at present is divided into six districts, viz., Nāgercōil, Neyyūr, Mārthāndam, Pāraśśāla, Trivandrum and Quilon. Educational work is being pushed on in every

^{*} Thé History of Protestant Missions in India from 1706—1871, p. 332.

district. The Medical Mission at Neyyor is of great benefit to the people. Industrial work is also carried on in some of the districts. The society conducts one second grade college and 237 schools.

775

According to the census of 1931 the adherents of the London Mission Church number 138,958.

The Church Mission Society.

The Mission commenced its activities in 1816 at the request of Col. Munro, the British Resident. "Previous to this, reports as to the desirability of mis-Early work. sionaries being sent were made by Col. Macaulay, the first British Resident, and several men had been sent from Madras and Calcutta to visit the Syrian churches". In the early years of activity they made no proselytes, attempting only an internal reform in the Syrian church. At first Munro's object was to get religious instruction imparted to the Syrian Christians by the members of the Church Mission Society. The Society sent Bailey, Baker and Fenn for the work. The three missionaries and the Metran of the Syrian church formed themselves into a committee for the proper management and control of the Syrian churches in Travancore and Cochin. A board consisting of the Resident and the Dewan exercised appellate authority over the committee in civil matters.

Munro was at the time wielding immense influence in Travaneore and Cochin. From the very first he took deep Encouragement interest in building churches and educaby Munro. tional institutions and in training priests who should be able to preach the Protestant faith. He collected subscriptions, encouraged the Syrian kathanars to marry, appointed members of the Syrian church to responsible offices, and worked strenuously to place that church under the supervision and control of English

clergymen. He encouraged the translation of the Bible into Malayalam. He wrote that he would employ "all human means at his disposal to promote a cause which it is one of the first duties of every Christian to support and encourage." In another letter he observed "I have afforded. since my first arrival in Travancore, the most decided attention to all classes of Christians and in particular to the Syrians".* On a subsequent occasion he wrote "I procured a donation of lands from the Sirkar to that Mission for the support of its poor and the maintenance of schools". † Again, in another letter he wrote that he was in hopes of "being able to procure a considerable donation of money to the college, and the master and students attended to it. clude that land may be procured near Kottayam at the rate of about the twelve years' purchase; and that for Rs. 20,000". The hope and the promise fructified into a royal grant. Mr Agur writes "Whenever Mr. Norton went to Cochin, Kottayam and other places for missionary tours, Munro despatched sepoys to guard the missionary's house ‡ in his absence and that such helps and tokens tended to raise the missionary cause". §

Munro's object appears to have been to bring the Syrian church under the Church Mission Society. "I hope" said he "you continue your endeavours to introduce the English language among the branches of study at the college. This is an object of great importance, and should claim your serious consideration. The translation of the English Liturgy is another object of primary importance, for I think, if it were well translated, it might, without any difficulty, be substituted in all the churches for their present forms of worship. You will of course gradually prepare the minds of the Syrians, by a reference to the scriptures, to abandon

^{*} The Malabar Syrians and the C. M. Society, P. Cheriyan, p. 364.

[†] The Malabar Syrians and the C. M. Society, by P. Cheriyan, p. 354.

¹ At Alleppy.

[§] Church History of Travancore.

the seven Sacraments, the Mass and other remnants of Roman Catholic usage." On Munro's return to England the Church Mission authorities in London testified to his missionary zeal by appointing him to the governorship of the Society.

The work of the missionaries in Travancore does not appear to have fared well when the official support of the Resident was no longer available in the A set back and same measure. The Syrians resolved to its cause. maintain their own faith and practices. There were some reasons for this change. Mr. Baker has given them in a few words. "The Metran Dionysius, who had been a friend to the missionaries, and who desired in some measure to reform his church, was now dead. Col. Munro also had left the country. Consequently the English clergy had lost a portion of their influence and hence were not regarded in the same favourable light by the body of the people. The new bishop was an extremely avaricious man. He at once began to ordain children and ignorant youths on receipt of sums of money and also let out the college lands on excessive rents appropriating the surplus to his own purposes. The combined ruling committee he utterly neglected; and soon discouraged the college and parochial schools, and forbade the habitual preaching of the gospel by the missionaries in the several churches. Mr. Fenn had been succeeded by others; and Messrs. Bailey and Baker had visited England for their health which had been much impaired. Some of these old missionaries had pleaded for a change of system, and were desirous of commencing an independent mission.: They argued that though they had been the means of diffusing some light, yet that while the Syrians used the Syriac language (understood by very few, even of the priests) in their church services, and as long as all the errors of the Greek Church were cherished and adopted by them, the co-operation of the Church Missionaries

with them, as with a church regularly constituted, tended rather to strengthen the rule and system of that church than to reform it. Hence there would appear to be no prospect of permanent good effected for the Syrian body. About this time. Bishop Wilson of Calcutta visited Travancore and at once saw that much labour had produced very little results. He accordingly made a proposition that the Syrian Church should reform itself of all errors that had been acquired by their connection with the Nestorians, and in later times with Menezes and the Portuguese; in short, that they should restore their own ancient canons, which were extant, thus returning to the periods nearest to the apostolic times."*

In 1836 the Syrian Christians severed their connection finally from the C. M. S. Church. From that time the missionaries commenced direct mission work with Separation and direct mission work. the approval of Bishop Wilson of Calcutta.

Köttayam was made their headquarters.

They established several mission centres in various places in Travancore and Cochin. The work was successful. They got converts from various communities. In 1847 they founded another centre at Thiruvalla. This was soon followed by another in north Travancore, which devoted its attention to the conversion of Arayans, and the work was chiefly carried on by Mr. Baker. At Māvēlikara Mr. Peet, the head of the mission, converted a Brahman family consisting of ten members. With the increase of the missionary stations the number of pastorates had to be increased. Natives also began to be ordained as pastors.

An important change in the constitution of the governing body of the C. M. S. in Travancore and Cochin took place in 1869, whereby the Society working in these

^{*} Report of the South India Missionary Conference, Mr. Baker's Paper, pp. 67, 68,

C. M. S. Church, Alleppey.

two States was removed from the control of the Bishop of Calcutta and placed under a Church Change in Council, its object being to effect greater constitution. self-support and self-reliance. In 1872 two councils were established, the Northern and the Southern, with Kottayam and Mavelikara as their respective headquarters. A Provincial Council was also instituted under the direct control of the Bishop of Madras. In 1873 there was a revival in the activities of the mission. In 1875, however, the labours of the missionaries received a set-back from the six years' movement associated with Vidwankutty.* Many accepted his teaching and his lead giving up their property and in several instances forsaking their wives and children

The dioceses of Travancore and Cochin were established in 1879. There are now fourteen dioceses comprised within this church. Till a few years ago this church went by the name of the Church of England in India and was also known in common parlance as the Anglican Church in India. It had some legal connection with the Established Church of England from which it was separated in pursance of certain enactments passed by the British Parliament. It then came to be known as 'The Church of India, Burma and Ceylon'. Though it has thus become legally independent of the Established Church of England, it retains its organic connection with the rest of the churches included in the world-wide Anglican Communion.

The governing body of the church is the diocesan council which was formed in 1928. There is a standing committee with eleven clerical and twentysix lay members with its committees, the Board of Finance, the Board of Education, the Board of Pastoral Work, the Board of Mission, the Board of Women's Work, the Board of Social Work and the

^{*} See below under the heading Yuyomayam.

Board of Literature. There are nine district councils. The mission conducts many educational and medical institutions.

According to the census of 1931, the C. M. S. Christians number 85,261.

The Yuyomayam.

In 1861 Mr. Peet of the Māvēlikara branch of the Church Mission Society succeeded in converting a few Brahmans of Māvēlikara to the Christian faith. Among these new adherents there was one Tamil Brahman who later on assumed the name of Vidwānkuṭṭy. He is well-known as the founder of the new sect called the Yuyōmayam.

After several years of work as pastor of the C. M. S. church at Kanniat he propounded certain new doctrines which were not accepted by his co-religionists. Vidwankutty therefore seceded in October 1875 with a body of followers, and six years later founded a new sect called the Yuyōmayam. He was a Sanskrit scholar and his eloquent sermons attracted large crowds around him.

The following are, among others, some of the essential points on which the adherents of the Yuyōmayam differ from the other Christians:—

- 1. They are pure vegetarians and total abstainers.
- 2. Both males and females are prohibited from wearing ornaments of any kind.
- 3. They have no churches; they carry on worship and conduct marriage ceremonies in their own houses; they bury their dead not in cemeteries but in their own compounds.
- 4. They do not observe Sunday as a holiday, all days of the week being equally holy to them.
- 5. They neither interdine nor intermarry with the Christians, nor have they any faith in incarnation, resurrection, or the final day of judgment.

6. Unlike the Christians, the husband or wife is entitled to succeed to the property of the other, and sons and daughters inherit in equal shares the property of the father and mother.

The members of the sect do not like to be included under Christians, though they are classified in the Census Report under the heading "other Syrians". According to the census of 1931, they number only 623. In 1911 their number was 1,121.

The Salvation Army. /

The Salvation Army started work in Travancore in They secured a firm footing in Nagercoil in 1892. In the beginning they started evangelising work among the Panchamas. A few months' labour encouraged their hope of securing large numbers within their feld. They accordingly withdrew their men from many other places in south India and had the greater part of the forces concentrated in Tra-Within a short time their converts numbered several hundreds. General Booth, the founder of the Army, was so pleased with the success of the work in Travancore that he paid a visit to the country. The visit produced a great impression on the converts. The Army extended its activities. In 1924 Trivandrum was made the headquarters of the Territorial Commander of the south Indian district. Divisional centres were established at Nagercoil, Thuckalay, Neyyattinkara, Trivandrum, Nedumangad, Kottarakara, Adūr, Māvēlikara, Rānni and Thiruvalla, each under the charge of a Divisional Commander.

The doctrinal teachings of the Salvation Army are based on the teachings of Jesus Christ. Its chief emphasis is on the necessity and possibility of every one obtaining salvation from sins through Jesus Christ. It believes that true repentence and faith in God and a rosolute turning from wrong are necessary to salvation, and that after conversion a man must walk with God in a new life. The

standards which the Salvation Army sets for its members are good conduct, a pure life, abstinence from alcohol and other narcotics. The pursuit of worldly pleasures is discouraged.

The Salvation Army is doing very good work in Travancore. The backward communities among whom they labour have derived great benefits from them, particularly in education. Industrial work is carried on in boarding schools both at Nāgercöil and Trivandrum.

Medical work has grown from a small beginning into the splendidly equipped Catherine Booth Hospital at Nagercoil with seven branch hospitals in different parts of the State. At Putheneruz near Mūvāttupuļa in north Travancore a leper colony was established in the early part of 1936.

According to the census of 1931, the Salvationists number 58,991. During the last decade they have increased by 74.4%.

The Lutheran Mission. (Missouri).

The parent body of this mission is the Evangelical Lutheran Synod of Missouri, Ohio and other states. Its beginnings date back to 1839 when a small band of German Lutherans left their homeland owing to religious oppression and emigrated to America. The earliest scenes of their work in India were in the districts of Salem and North Arcot. The missionaries started work in Travancore in the village of Vadaśśēri near Nāgerceil. They chiefly worked among the Panchama community. After fifteen years of work in Trivandrum and its vicinity the missionaries extended their work to central and north Travancore. They opened schools in many places and carried on much beneficial work among the backward communities. It has always been a matter of principle with the Missouri Lutheran Mission to teach thoroughly and indoctrinate its religious workers before sending them out so that they might represent their church truly. Catechist training

classes were opened at Nagercoil and Trivandrum. In 1924 a seminary was opened at Nagercoil to provide for advanced religious training.

The headquarters of the mission is at Pērūrkaḍa in the vicinity of Trivandrum. The total number of congregations attached to the mission in 1936 was 117, with a membership 11,706. The mission conducts 69 schools with a total enrolment of 4.473 pupils.*

The Knanaya Syrians.

The history of the Knanaya Syrians is preserved in tradition as well as in certain ancient songs which they still use in their wedding ceremonies. The songs describe graphically the departure from Syria, the pathetic scene of parting at the time of embarkation, the voyage in three ships, the arrival at Crānganore, the interview with Chēramān Perumāl with valuable presents from the west and the grant of privileges inscribed on copper plates. They also refer to the arrival of two Portuguese ships in the Malabar waters in A. D. 1500, the reception given to the Portuguese as fellow-Christians by the Syrians, and the dispersal of the Christian community whereupon the Knanaya Syrians came to Kaḍuthuruthy and settled down there before they migrated to the northern and southern parts of modern Travancore.

The Knanaya Syrians formed one homogeneous community until the 16th century when the Portuguese came to Malabar. In Portuguese times the Knanaya Syrians became divided into two sections, one adhering to the Patriarch of Antioch and the other to the Pope. Since then the Antiochian Knanites and the Roman Knanites exist as two distinct communities having little intercourse with each other. The first Antiochian Knanite bishop was Mar Severios who

^{*} Figures were supplied by the mission authorities.

was ordained in 1910 as Metropolitan of what is now known as the Syrian Knanaya diocese with its headquarters at Chingavanam near Kōttayam. Likewise, the Roman Knanites were constituted into a diocese with Mar Mathew Makil as the first Knanite bishop of Kōttayam in 1912. There are 22 churches in the former diocese and 35 in the latter, all lying scattered in Travancore from Thodupula in the north to Pathanamthitta in the south. Both communities together number between 50 to 60 thousand souls.

APPENDIX.

Faith and Practice.

- (i) The Jacobite Syrian Church.
- 1. They believe in one Holy Trinity, Father, Son, and Holy Spirit, the one eternal God.
- 2. Jesus Christ, the incarnated Eternal Son of God, has one nature; but their faith is different from the belief of Eutychus.
- 3. Holy Spirit proceeds from the Father as expressed in the Nicean Creed.
- 4. They follow the Nicean Creed, as established in the three Ecumenical synods at Nice, Constantinople, and Ephesus.
 - 5. There are seven Holy Sacraments, viz.,
 - i. Baptism.
 - ii. Holy Eucharist.
 - iii. Mooron oil.
 - iv. Confession.
 - v. Unction of the sick.
 - vi. Holy order and
 - vii. Matrimony.
- 6. Holy Eucharist is served in one kind. (Body and Blood mixed). They use leavened bread called 'Hamiro', and wine mixed with water in Eucharistic Service. Holy

Communion is administered for the forgiveness of trespasses, remission of sins and for eternal life.

- 7. They have private confession before priests.
- 8. They pray for the quick and the faithful departed, and intercede to the Blessed Virgin Mary and other Saints.
 - 9. They follow the Old Calendar.
- 10. They believe that the Patriarch of Antioch is the successor of St. Peter.
- 11. Eucharistic service is held even when there are no communicants other than the officiating priest.
- 12. The immaculate conception of Virgin Mary and 'infallibility' have not been accepted by them as their doctrines.
 - 13. They do not believe in purgatory.
 - 14. They have no images and do not adore them.

(ii) Orthodox (Jacobite) Syrians.

- 1. They believe that the Holy Ghost proceeds from the Father and taketh from the Son.
- 2. They believe in the one nature of Christ; perfect Divinity, and perfect Humanity inseparably united. But their faith is different from the teachings of Eutychus.
- 3. They follow the Nicene Creed as established in the two Ecumenical Councils of Nice and Constantinople and confirmed in the Ecumenical Council of Ephesus.
 - 4. They believe in Seven Sacraments, viz.,
- i. Baptism [They use Mooron (Chrysm) and Mesaho in Baptism]. ii. Mooron Oil (Chrysm). iii. Holy Qurbana (Lord's Supper). iv. Confession. v. Matrimony. vi. Ordination. vii. Anointing the sick.
- 5. Communion is served in one kind. Bread and wine mixed.
 - 6. They use leavened bread in Qurbana (Mass).
 - 7. They have auricular confession.
- 8. Eucharistic service is held even when there are no communicants other than the officiating priest.

- 9. Holy Communion is administered for the remission of sins also.
 - 10. They pray for the dead.
 - 11. They pray to Virgin Mary and Saints.
- 12. The immaculate conception of Virgin Mary and infallibility have not been accepted by them as their doctrines.
 - 13. They do not believe in purgatory.
 - 14. They have no images and do not adore them.
 - 15. They follow the old Calendar.

(iii) Mar Thoma Syrians.

- 1. They accept and receive the Canonical Scriptures of the Old and New Testaments consisting of sixty six books as of supreme authority in all matters of faith and doctrine.
- 2. They believe in the Holy Trinity, the Father, the Son, and the Holy Spirit, worshipped and adored as the one only true God.
- 3. They believe that Jesus Christ, the Redeemer of mankind, is the express image of God, truly God and truly man.
- 4. They hold that the Holy Spirit proceeds from the Father.
- 5. They believe that faith in Lord Jesus Christ is the means of full and free salvation. This salvation implies assurance of forgiveness of sins, the enjoyment of new life and power which enable one to overcome the world, the flesh and the devil, thus being empowered to fulfil the Will of God, and finds its consummation in the perfect glorification of body, soul and spirit at Christ's coming.
- 6. They hold that the Nicene Creed is a symbol of faith, never to be altered.
- 7. They accept the threefold ministry of Semmas (Deacon) Kaseesa (Presbyter) and Episcopa (Bishop) as an institution, handed down from the Primitive Church and to be maintained at all times and under all circumstances.
- 8. They hold that Holy Baptism and Holy Eucharist (Kurubana) are the only two sacraments ordained by Christ Himself and are pre-eminent among the holy rites of

the Church, which serve as means of Divine Grace. The other five traditional sacraments—Confession, Ordination, Matrimony, Extreme Unction and use of Anointing Oil (Mooron) at Baptism are in common practice in the Church, though not valued as sacraments on a level with the first two. Confession practised is public and general and not private and individual.

- 9. They use leavened bread and administered bread and wine separately in Holy Eucharist. There is no celebration of the Eucharist when there are no communicants.
- 10. They believe that in the Holy Eucharist, through remembrance of Christ's sacrifice on Calvary, the communicants partake of the body and blood of Jesus Christ.
- 11. They do not practise prayers for the dead, invocation of Saints, adoration of Virgin Mary and veneration of images.
- 12. They hold that the doctrines of Immaculate Conception, Purgatory and Infallibility are unscriptural.

(iv) Latin Catholics.

- 1. They believe in the existence of one God in three Persons; the Second Person called the Son is from all eternity generated from the First Person, called the Father; the Third Person, called the Holy Ghost proceeds from the Father and the Son from all eternity; this is what they call the 'Holy Trinity'.
- 2. They believe that God, the Self-existing Being, has created heaven and earth as well as man, since none of the created beings have in themselves the reason or the ground of their existence.
- 3. They believe that the first man was created in a perfect state and that in him the whole human nature was elevated to a supernatural state and endowed with supernatural grace through which man, after his death, was able to see and love God as He is; but the first man, by committing

sin, lost for himself and for the whole human race, which he represented, the sanctifying or the supernatural grace, and since that moment the human nature is transmitted to the posterity without sanctifying grace; This they call 'Original Sin'.

- 4. They believe that the Second Person of the Holy Trinity became man, that is to say, assumed to Himself real human nature in order to atone for the sin by His Passion and death, and to show man the way to heaven by imparting to them His Divine Doctrine; this is what they call the 'Work of Redemption'.
- 5. They believe that the Second Person of the Holy Trinity assumed human nature in the womb of the Blessed Virgin Mary what is called "Incarnation"—through the special intervention of the Holy Ghost; so they believe that the Blessed Virgin Mary is the 'Mother of God'.
- 6. They believe that the Blessed Virgin Mary, so intimately connected with the Holy Trinity, Who is sanctity Himself, was conceived in grace, without the original sin, and this they call the *Immaculate Conception* of Blessed Virgin Mary.
- 7. They believe that the Second Person of the Holy Trinity after becoming man (and called Christ) while living in this world, instituted a perfect society called the *Church*, and invested it and its head, the Pope, with an infallible authority to teach the Word of God, and at the same time to administer the *Seven Sacraments* or external Rites instituted by Him for the sanctification of men.

The Seven Sacraments are:— (a) Baptism; (b) Confirmation; (c) Holy Eucharist or Last Supper; (d) Penance; (e) Extreme Unction; (f) Holy Ordination; (g) Matrimony.

8. They believe that those who die well or in the love of God—what they call 'sanctifying grace'—go either to Heaven or Purgatory: straight to Heaven those who are perfectly pure, and to Purgatory those who—though in

sanctifying grace—have not yet atoned for all the *fenalties* of their sins; but they too go to heaven after atoning for the penalties. Those, however, who die in mortal sin go to hell.

- 9. They pray to Blessed Virgin Mary and Saints and venerate their images.
 - 10. They pray for the dead.
- 11. In the Sacrifice of the Holy Mass they use unleavened bread, and do not administer the Holy Communion to lay-flock under the species of wine.
 - 12. They have auricular confession.
 - 13. They follow the New Calendar.

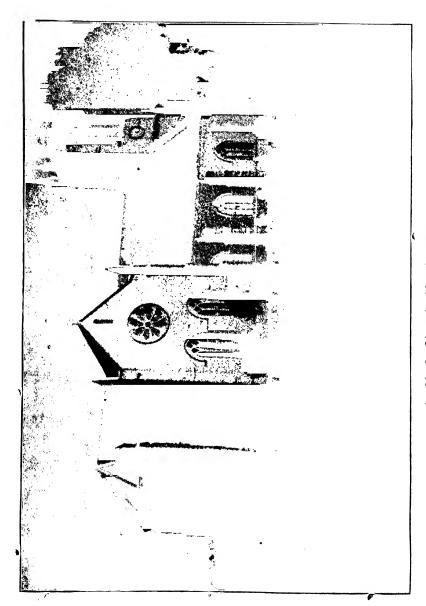
(v) Syrian Catholics.

- 1. They believe that the Holy Ghost proceeds from the Father and the Son.
- 2. They believe in the two natures of Christ, Divine and Human.
- 3. They follow the Nicene Creed but have added the filioque clause to it.
- 4. They believe that there are seven Sauraments, viz.,
 - i. Baptism.
 - ii. Confirmation.
 - iii. Holy Eucharist.
 - iv. Confession.
 - v. Extreme Unction.
 - vi. Ordination.
 - vii. Matrimony.
- 5. They do not serve Consecrated Wine to laymen for Communion.
 - 6. They use unleavened bread in Holy Mass.
 - 7. They have auricular confession.
- 8. Eucharistic service is held even when there are no communicants.
- 9. Holy Communion is administered for the nourishment of souls.

- 10. They pray for the dead.
- 11. They pray to Blessed Virgin Mary and Saints.
- 12. They believe in the immaculate conception of the Blessed Virgin Mary and have it as a doctrine.
 - 13. They believe in the existence of purgatory.
- 14. They believe in the Primacy and Infallibility of the Pope.
 - 15. They do not adore but only venerate images.
 - 16. They follow the Gregorian Calendar.

(vi) Anglicans.

Like all other branches of the Universal Christian Church, the Church of India, Burma and Caylon considers the Nicene Creed as containing in a nutshell the fundamental doctrines of the Anglican religion. In it is affirmed the belief in a Supreme Triune God, the Creator of the Universe, the incarnation, life and vicarious death, resurrection and ascension of Jesus Christ, the second person in the Trinity, in His coming again to judge the 'quick and the dead'; in the Holy Ghost proceeding from the Father and the Son, in the forgiveness of sins solely through the merits of Jesus Christ and in the gift of eternal life. This Church observes two Sacraments, viz., (1) Baptism whereby the followers of the religion are admitted as members of Christ's visible church, and wherein is acknowledged the fealty to Christ. (2) The Lord's Supper which is celebrated in glad and thankful remembrance of Christ's death for the forgiveness of sins and by participating in which the followers, though not accepting the doctrine of Transubstantiation, believe that they spiritually partake of the body and blood of Christ and thereby receive spiritual nourishment which would strengthen the efforts to lead lives of service and self-sacrificing love. Along with these they hold the doctrine of justification by grace through faith in Christ, and the teaching that the Holy Scripture is the ultimate standard of Christian doctrine and conduct. They further hold



L. M. S. Church, Marthandom.

that liberty of conscience, the right of private judgment and the privilege of approaching God through Christ directly without the help of any other intermediaries are the prerogatives of every believer in Christ.

(vii) The South India United Church. (L. M. S.)

The S. I. U. C. is a branch of the reformed Protestant Church and is the result of union between Presbyterian and Congregational Mission Churches. It has no bishops and is strongly opposed to sacerdotalism and ritualism. It believes in the priesthood of all true believers and in the right of every individual member to exercise some control of the government of the Church through local committees and area councils.

It believes that the spiritual nature of true religion is best preserved in simplicity of external organisation. It believes that Christ, the Head of the Church, is spiritually present wherever believers meet in His name and that the elaboration of externals tends to obscure this fact. Its members try to witness to their faith by pious lives and loving service. In their relationships with one another they seek to conform to the teaching of Jesus, "One is your Master, even Christ, and all ye are brethren". Their ministers and church leaders are appointed by the congregations and, as far as is practicable, the local congregation, which is regarded as the local expression of the Church Universal, is free from external control.

The ancient creeds of the Church are recognised as valuable historic statements of the fundamentals of the Christian Faith. But, since the members of the S. I. U. C. believe in the continual enlightenment and inspiration of the Holy Spirit of God, they cannot bind themselves to creeds written in thought-forms and symbols of former generations, but believe that Christian truth must find expression in symbols appropriate to the experience and thought of each generation.

The S. I. U. C. observes the two sacraments of Baptism and The Lord's Supper and regards them as important means of grace. But it does not believe in Baptismal Regeneration or in Transubstantiation.

Its members assent to a Confession of Faith which declares belief in the mystery of the Holy Trinity; the Bible as the Word of God; the Incarnation; forgiveness and salvation from sin through the love of God revealed in the life and death of Jesus Christ upon the cross; the inspiration and guidance of the Holy Spirit; the Church as the instrument of God for the realisation of His Kingdom; the resurrection of the dead; the final judgement and the gift of enternal life.

(viii) The Lutheran Mission (Missouri).

The Lutheran Mission differs from other Protestant denominations by its adherence to the Confessional Principal. Its confessional writings, which are embodied in the Book of Concord of the year 1580, are to the present day accepted by the members of this church-body as a true and faithful confession of the doctrines of Scripture over against those who deny these doctrines. The principal doctrines for which this church-body stands, and which it holds to be the fundamentals of Christian belief, are briefly, these:—

The Bible. They believe that the Holy Scriptures of the Old and New Testaments are in every part the inspired Word of God, in which any person of ordinary intelligence and unprejudiced mind can find the Way of Life, and which, as the revelation of God, is unalterable and complete, requiring no human interpretation, and permitting no additions to its teachings from any source whatsoever.

God. They believe that God is one divine essence in three persons, Father, Son. and Holy Ghost.

Man. They believe that man was in the beginning of time created by God, as an intelligent moral being,

consisting of body and soul. He was created holy and perfect, but in his present fallen state is entirely depraved, and enslaved in the service of sin.

Sin. They believe that sin is a transgression of the divine law, and that man is subject to death and eternal damnation by reason of the guilt that attaches to sin.

Redemption. They believe that God, in His infinite mercy, resolved to save mankind, and that the divine Redeemer appeared in Jesus of Nazareth, the son of Mary and Son of God, who perfectly obeyed-the Law of God which man has transgressed, by His sufferings and death, paid the penalty for the guilt of the entire world, and by His resurrection from the dead has been declared the all-sufficient, divine Redeemer.

Faith. They believe that all who penitently accept Christ as the one and only Saviour in sincere faith are justified in the sight of God, and made heirs of salvation.

The Church. They believe that all who thus accept in true faith the forgiveness of sins procured by Christ's atonement are members of the Church of Christ. They believe that true Christians are found wherever the Gospelmessage of redemption through the atoning sacrifice of Christ is made known. No denomination or sect can claim to be the "only-saving church", but all are in duty bound to adhere in every point to the doctrine of Christ and His apostles and retain the administration of the Sacraments in their integrity.

They deplore the fact that the Christian Church on earth is divided, due to men forcing their own interpretations upon the Bible instead of simply accepting its teachings. A union of churches, well-pleasing to God, can be attained only when all concerned are willing to bow to the supreme authority of Scripture alone, and reject everything that does not agree therewith.

Sacraments. They believe that the sacrament of Baptism, when administered according to the command of 100

Christ to infants and adults, is a means of grace which efficaciously offers the grace of God and forgiveness of sins.

They believe that in the sacrament of the Lord's Supper the communicants receive with the bread and wine the true body and blood of Jesus Christ, and that all *believing* communicants share in the forgiveness of sins procured by Christ's sacrifice.

The Second Coming of Christ. They believe that Christ will visibly return to the earth on the Last Day to judge the world.

The Resurrection. They believe that on the Last Day the dead will rise, their souls being clothed in the bodies which they possessed in this present life.

The Judgment. On the Last Day, Christ will receive into glory His believers, including all who died in the faith, and will pronounce the eternal doom upon all who refused to acknowledge Him as their Redeemer.

All the sects venerate the memories associated with the life of Jesus Christ. The Christmas, Good Friday and Easter Sunday are observed by all. Some of the sects observe certain fasts and other ceremonies,

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CHAPTER XI.

RELIGION—ISLAM.

Islam is the religion of three and a half lakhs of the people of Travancore who form 6.9 per cent, of the total population of the State. There is no com-The prophet. munity in India or perhaps in any part of the world which protects its faith by sanctions, temporal and spiritual, with more earnestness than the Muslims. The holy Prophet of Arabia is to them a name to conjure with, a stimulus to exertion to maintain the puissance and glory of God. The extraordinary circumstances which raised him to power had in them something very dramatic. Having lost his father while a babe in arms, and his moth er in early childhood, and growing up amid scenes of privation and danger, the Prophet of Islam cultivated from early age a fortitude of character and a spirit of resignation. The pangs of suffering caused by the death of all his sons, one after another, generated in him a growing sympathy for human suffering. Belonging as he did to the tribe of the Koreish, who were the guardians of the old religion and the supervisors of the rituals of the Kaaba, Muhammad realised to the full the inadequacy of the principles professed by his countrymen which regulated the worship of God. He prayed, he thought, and he meditated. For months and years he sought for the explanation of the universe in the solitude of the hill and the desert. At last the Lord's light was upon him, and he decided to devote the rest of his life to the improvement of humanity by offering to them the ministrations of a faith which he believed to be the only true one.

Muhammad's message was one of truth and love—love to all, irrespective of age, sex or condition, unfettered

by geographical limits or national boundaries. The religion of Muhammad bears the distinctive name Islam, a term which Mussalman writers always use in preference to Muhammadanism. Islam is an Arabic word meaning peace, the performance of one's duty, complete submission to God.

"A Muslim, according to the Holy Quran, is he who has made his peace with God and man, with the Creator as well as his creatures........ 'Peace' is the greeting of one Muslim to another, and 'Peace' shall also be the greeting of those in Paradise....... They shall not hear therein vain or sinful discourse except the word 'Peace, Peace'."*

'The principal bases on which the Islamic system of faith is founded are:-

- 1. "A belief in the unity, immateriality, power, mercy, and supreme love of the Creator;
 - 2. "Charity and brotherhood among mankind;
 - 3. "Subjugation of the passions;
- 4. "The outpourings of a grateful heart to the Giver of all good; and
- 5. "Accountability of human actions in another existence."

The authorities for the principles of Islam are the Quran, the Hadis, the Ijma, and the Quias. The Quran is the written word of God, the Hadis are the sayings and acts of the Prophet, and the Ijma consists of concurrent opinions expressed by the highest authorities on points on which neither the Quran nor the Hadis are clear and explicit; the Quias is the analogical reasoning of the learned with regard to the teaching of the Quran, the Hadis and the Ijma. Of these the Quran is the most authoritative. Its authority is absolute not only in all matters of religion, but in the sphere of politics, ethics and science, in short, in everything concerning the life of the Faithful. And no

^{*} The Holy Qur-An, Maulvi, Muhammad Ali. Preface, p. VI.

[†] The Spirit of Islam, Ameer Ali, p. 138.

wonder; for the sacred Book is known as the Al'Quran, "The Reading," the reading of the man who knew not how to read. The revelation came to Muhammad when he was asleep or in a trance in the solitary hill of Hira. A voice said "O Muhammad! Thou art Allah's messenger, and I am Gabriel."*

"Your God is the one God", says the Quran. "There is no God but He, the most Merciful." To this ideal the prevalence of idolatory in any form was highly prejudicial; and Muhammad denounced the worship of idols in severe terms. The service of the one God was to be not by the performance of ceremonies but by devout and conscientious prayer. "The one and only method for a Moslem seeking salvation is the holding fast to the Iman of his Prophet, carrying out scrupulously his Din and obeying faithfully his Shariat". Of this resignation to God, prayer is a necessary concomitant. 'Prayer', say the theologians, 'carries us half-way to God, fasting brings us to the door of His Palace, and alms procure admission'. The five pillars of practice are the saying of the creeds, the five stated periods of prayer, the thirty days' fast of Ramzan, the legal alms and the pilgrimage to Mecca. The value of good acts, good words and good thoughts is emphasised in the Quran with reassuring earnestness.

Islam does not profess to be a new religion. It only restores to their original purity the religious faiths as expounded by the prophets and preachers of by-gone ages. It is claimed that Islam was the religion of the earlier prophets, Adam, Noah, Abraham, Moses and Jesus. The teachings of the Holy Quran abrogate the former teachings and possess the authority of the latest revelation by Allāh through the Prophet. According to the principles of Islam, "the right way is in itself distinguished from the wrong. Hence there is no compulsion in religion".

^{*} The Meaning of the Glorious Koran; Marmaduke Pickthall.

The Holy Prophet, even in the heyday of his glory, behaved like an ordinary mortal. "The Apostle of God submitted to the menial offices of the family; he kindled the fire, swept the floor, milked the cows, and mended with his own hands his shoes and his woollen garments. Disdaining the penance and merit of a hermit, he observed without effort or vanity the abstemious diet of an Arab and a soldier".

"The creed of Mahomet is free from suspicion or ambiguity; and the Koran is a glorious testimony to the Unity of God. The prophet of Mecca rejected the worship of idols and men, of stars and planets, on the rational principle that whatever rises must set, that whatever is born must die, that whatever is corruptible must decay and perish. In the Author of the Universe, his historical enthusiasm confessed and adored an Eternal Being without form or place, without issue or similitude, present to our most sacred thoughts, existing by the necessity of His own nature and deriving from Himself all moral and intellectual perfection".* "The creed is pure monotheism: any subdivision of the omnipotent power is the worst form of heresy; and any visible representation of the deity is a heinous sin".

Islam is the most democratic of religions. "It recognises no caste of priesthood, allows no monopoly of spiritual knowledge or special holiness to intervene between man and his God. Each soul rises to the Creator without the intervention of priest or hierophant. No sacrifice, no ceremonial invented by vested interests, is needed to bring the anxious heart nearer its Comforter. Each human being is his own priest in the Islam of Mohammed. No one man is higher than the other."† The brotherhood of the faithful is one of its most prominent features. "People," says the Prophet, "Ye people, listen to my words and understand the way. Know that all Moslems are brothers

^{*} The Decline and Fall of the Roman Empire, Gibbon, Chapter L.

[†] The Spirit of Islam, Ameer Ali, p. 165.

unto one another. Ye are under brotherhood. Nothing which belongs to another is lawful unto his brother unless freely given under God's will. Guard yourself from committing injustice." The personal example of the Prophet invested his words with a halo of compelling sanctity.

In the dissemination of the dogmas so dear to his heart and bearing on them the guaranteed authenticity of revelation, the Prophet of Arabia trampled Spread of Islam. on the corns of powerful vested interests making his own kinsmen the most inveterate enemies. the early stages his work met with but a cold reception. The Muslims were so badly persecuted that they were obliged to find asylum among the Christians of Abyssinia. The Prophet of God was himself obliged to flee from But his resolute courage and indomitable perseverance made the Hijira, 622 A.D. the year of his flight from M cca to Medina, the beginning of the establishment of an empire over the minds of men. Many a time he was obliged to wrest safety from the assassin's sword. More than once too, he and his devoted men were obliged to take defeat at the hands of powerful hordes who swore to root out the inconvenient teachings which affected their pockets and 'insulted' the faith of their ancestors. Muhammad saw in defeat the precursor of permanent success, and the converts he gained for Islam were actuated by a courageous spirit which predisposed them to dedicate their lives at the altar of the faith. In less than two hundred years after the Prophet's death the banner of Islam spread over the whole of Arabia and the 'Crescent sharpened as it gilded the swords of the Faithful.' The Muslims were fond of adventure from the earliest days. Mecca was for centuries the meeting place of caravans which distributed the products of the world over Europe and Asia. Nor was this commercial activity confined to the land. The Arabs braved the dangers of the deep with cheerful

enthusiasm in their sustained endeavour for the acquisition of wealth and the propagation of the faith.

Malabar was in those days the meeting place, not only of merchants but also of scholars of the east and the west. The Muslim was a warrior, merchant Islam in Kerala. and missionary, all in one. Within two hundred years of the death of the Prophet the Muslims from Arabia appear to have made settlements in different parts of Kerala on the sea coast. At Calicut they gained influence from the very beginning. The Kēraļolpathi speaks of the assistance given by Muslims to the Zamorin who raised himself to a prominent position in Malabar with their support. Fra Bartholomew held the view that the first batch of Muslims reached Malabar in the reign of Caliph Walid in the ninetieth year of the Hijira, i. e., about 712 A. D. This is confirmed by the Mackenzie Manuscripts and is further supported by the account of the king of Caylon sending to Hajjaj, the Viceroy of the Eastern Provinces, the orphan daughters of the Muslim merchants who had died in his dominions. The story goes that some of those girls were attacked by pirates off the coast of Sind and that it was the offence thus given to the Caliph's authority which induced him to send an expedition to India. The invasion of Sind by Muhammad Kasim was about that time. An inscription in Pantalayini Kollam in north Malabar mentions the death of a Muslim in that place in the year 166 of Hijira.*

Considering the importance of the Malabar ports on the oceanic trade routes between the east and the west in early times it may be assumed that Muslim settlement in Kēraļa must have begun earlier than in Ceylon. There is positive testimony to this fact given by the merchant, Soleyman of Siraf, who visited Malabar in the middle of the ninth century. The Muslims settled in numbers on

^{*} Malabar Manual, Logan, Vol. I, p. 195.

the coast for trading purposes. But it does not appear that Islam made any progress though the Māppilas being themselves regular in worship were jealous in their attempts to gain proseylites.* The traveller referred to above has left on record:—"I know not that there is any one of either nation (Chinese and Indians) that has embraced Muhammadanism or speaks Arabic." In the 'Meadows of Gold and Mines of Gems', written about 950 A. D. by El Masudi, Arab traveller and merchant, there occurs a description of Malabar. Alberuni † who was familiar with this part of India mentions Quilon. Mr. Logan alludes to a traditional account of the conversion of the last Chēramān Perumāl to Islam.

There seems to be a kernel of truth in these traditions though writers on the subject often confound the Muslims with the Buddhists. The mistake was repeated by Francis Day who says that on the conversion of a Chēraman Perumal to the Baudha faith, he was deposed by the persuasion of the Brahmans. The Muslims were thenceforth deprived of the right of practising their faith in Malabar, though the Arabs were permitted to continue their trade. "The last of the Perumals", it is said, "dreamed that the Full Moon appeared at Mecca on the night of the New Moon and that, when at the meridian, split into two, one half remaining and the other half descending to the foot of a hill called Abi Kubais, where the two halves joined together and then set." Sometime afterwards, a party of Muslim pilgrims on their way to the foot-print shrine at Adam's Peak in Caylon chanced to visit the Perumal's capital and were admitted to an audience and treated most hospitably. On being asked if there was any man in their country by name Sheikh Sekke-ud-Din, it is said, they related to the Perumal the apocryphal story of Muhammad having, by the miracle about which the Perumal had

+ 970-1039 A. D.

[·] Graeme's Report cited by Logan in Malabar Manual, Vol. I, p. 197.

dreamt, converted a number of unbelievers. The Perumal was much interested in the story and secretly made known to the Sheikh his intention "to unite himself" to them. When the Sheikh returned from Ceylon, the Perumal secretly directed him "to make ready a vessel and provide it with everything necessary for proceeding on a voyage". He then embarked secretly in the vessel prepared for him along with the Sheikh and his companions, and they proceeded to Pantalayini Kollam.

From there he sailed to Sahr where he assumed the name of Abdul Rahiman Samoori and stayed there for a considerable time. It is said that he projected a missionary enterprise to convert his erstwhile subjects in Malabar. But he was taken away from the field of ambition by the hand of death. However, he is said to have charged Malik ibn Dinar, his two sons and other relations with the task so dear to his heart. He also gave credentials to certain princes and nobles in Malabar directing them to grant permission to the bearers to build mosques and propagate the faith. He directed them to land nowhere save at Koţunnallūr, Darma Pattanam, Pantalayini Kollam, or southern Kollam (Quilon).* Mosques were erected, so the account goes, at Kotunnallür, Quilon, Madai, Vakanür, Mykalath, Cassargōde, Cheruvapaṭṭaṇam and Pantalayini. This is said to have taken place in 843 A. D.

Little reliance can be placed on this version given by Logan and followed by other writers. Mr. K. P. Padmanābha Mēnon has, after a full and detailed consideration of the whole evidence bearing on the question, dismissed the story as unworthy of credit. The wealth and variety of the figments of fancy exhibited by the Buddhists, Christians and Muslims to claim the last Chēramān Perumāl as a convert to their own faith, and the divergence of the tradition which sends the Perumāl to Mylāpore, Sahr Mukkal and Benares, and the confounding of the names

^{*} Malabar Manual, Logan, Vol. I, pp. 192 - 193.

Zamorin and Chēraman Perumal by writers who found the basis for their conclusions on ill-assorted legends have thrown many obstacles in the way of research. it may be predicated with considerable probability that the Malabar prince who became a convert to Islam was not a Chēraman Perumal but one of the Zamorins. The Muslim merchants were treated with courtesy and consideration in all parts of the Malabar coast and were permitted to worship God in their own way unhampered by local laws or local prejudices. Malik-ibn-Dinar sent out Malikibn-Habib with his wife and some of their sons to southern Kollam. There also they were received hospitably. apparently by the southern Kolathiri (Travancore raja), and a second mosque was founded, of which Hassan, one of the sons, became Kazi. Some of the remaining sons, accompanied by their father, next set out for the dominions of the northern Kölathiris, where a third mosque was founded and endowed.* The toleration extended to the Muslims by the Hindu kings and their subjects was greatly ap-The alien settlers had neither the strength nor the inclination to make conversions to the faith. The Prophet himself had given the command "Fight in the way of Allah against those who fight against you, but begin not hostilities. Lo! Allah loveth not aggressors."†

In the course of a few centuries the number of Muslims in Malabar appears to have increased considerably. They were of two classes:—

- 1. The descendants of Arab colonists of the pure stock born of Arab mothers.
- 2. The descendants of Muslims who took to wife the women of the country belonging to certain communities.

^{*} Malabar Manual, Logan, pp. 1:3-194.

[†] The Glorious Koran, Marmaduke Pickthall, p. 48.

The latter class increased in numbers. "They, no doubt", says Francis Day, "are descended from Arab fathers who traded to the coast and formed fugitive alliances with Thiyan or Chozan women; for ideas regarding marriage ties are rather peculiar in Malabar. The children never appear to have been claimed by the father." He continues, "They could not be considered Hindus, neither were they pure Muhammadans, and, rejected both by Hindus and Muhammadans, formed communities and churches of their own combining the superstitions of the former race and the intolerance of the latter. The old Moplas assert that being of Arabic extraction they are of better birth than the Tartar races of Northern India". The people of Malabar and their rulers, who were tolerant to the religions of the many nations who traded in their ports, particularly those of Calicut and Travancore, appear to have given them all legitimate help and encouragement. "In the former kingdom", says Barbosa, "the Moorish merchants stood in such esteem that the King gave each one of them a Nayar to guard him, a Chetty scribe for his accountant, and a broker to help him in his trade." On every Friday and on every solemn feast-day the Kothaba was celebrated according to the prescribed rules of Islamism.*

The Muslims on their part respected the customs and usages of the country and maintained the most friendly intercourse with the native population. Mosques were erected in many a convenient place. Several persons of the higher castes also entered the Islamic fraternity. In the twelfth century a Nāyar chieftain, one of the ministers of the Kōlathiri aja, embraced the faith. It has to be remembered that while in north India the spread of Islam was due in large measure to the political domination of Turks and Afghans, and the propagation of the

^{*} Abdur Razak quoted in the History of Kerala by K. P. Padmanabha Manon, Vol. II, p. 538.

faith in south India received a push from the sultanate at Madura, in Travancore its growth was advanced by reciprocity of good feeling between the Hindus and the Muslims. Temples and mosques situated with in a few yards of one another have been functioning for centuries without hindrance. The Hindu Utsavams and the Muhammadan ceremonies like the Channanakkudam have been matters of general local interest amounting frequently to local enthusiasm. The difficulties in "cow-killing" and "music before mosques" were unknown.

But commercial rivalries embroiled the Muslims with the Portuguese. The latter brought with them an explosive fanaticism. Albuquerque, avowed his desire to "strip the shrine of Mecca and carry off the body of the Prophet (whom he called the false Prophet) with a view to ransoming the Holy Temple of Jerusalem in exchange".* The Arabs attacked the Portuguese factory at Calicut and killed the Agent and a number of his men. The kingdom of Cochin was: drawn within the vortex of the struggle on a promise made by the Portuguese that they would make the raia Zamorin of Calicut some day. Attacks and reprisals became the order of the day. The Arabs retaliated by attacking the capital of the Cochin raja who was the avowed friend of the Portuguese. The contest went on unabated for many years until the establishment of Portuguese supremacy in the Indian waters became an accomplished fact. Despite the assistance of the Mameluk Sultans of Egypt and the Emperors of Turkey, the Arabs of the Indian ports succumbed to the "Cavaliers" of the Cross. But their difficulties soon vanished and to-day the Muslims form a very important community in Kērala. In Travancore their numbers are strong in the towns, but there are very few localities even on the hills where they are not to be found. The number of mosques which was 254 in 1820 A. D. has now risen to 756.

^{*} Hakluyt Society Papers, 1875—1884, Vol. IV, p. 37.



The Muslims appear to have settled in Malabar not long after the time of the Prophet. They were permitted to follow their religion in peace. They Travancore and had nothing of the troubles which their Islam. co-religionists in the Deccan had to encounter in the wars for self-preservation which were being waged between the Hindu Empire of Vijayanagar and the scions of the Bahmini Dynasty. But there was no organised effort to secure converts. The Thangals and other men of religion concentrated their efforts in maintaining the integrity of the community and keeping alive the religious observances transmitted to them by their ancestors. "The scruples of the parents", says Logan, "prevented them from permitting their children to attend the schools of the Hindus". The faith was there, always robust, resolute and jealous. The prayers at the mosques were kept up with devotion; the fasts were scrupulously observed. Allah was worshipped and the Holy Prophet's name was sedulously venerated. But attempts to teach the followers the real principles of Islam there were none. The Malabar Muslims were scattered over the dominions of a large number of ruling princes, all of them Hindus, who, though tolerant to the community as a whole, and gracious to individuals, could not be expected to concert measures for the expansion of Islam. The Muslims, however, kept on to their faith with undiminished ardour, not failing to take advantage of the opportunities afforded by the condition of the Hindu society which, by the stringency of the caste rules, drove considerable numbers from among the lower classes to the religion which declared the equality and fraternity of all within its fold.

The Muslims always received very kind and generous treatment at the hands of the rulers of Travancore. So great was their attachment to the ruling family that when a Mughal Sirdar made an irruption into Travancore in the middle of the seventeenth century the local

Muslims not only refused to join the invader but gave their support to the State in turning him beyond the Ārāmboly frontier. Successive Mahārājas hav confidence in the loyalty of their Muslim subjects. Bora Musalmans and Kutchi Memons first came to Travancore on the invitation of Dewan Kaja Kesava Das. The rulers interested themselves not only in their temporal affairs but were also solicitous of rendering assistance in the conduct of their religious observances. The attitude of the Mahālājās of Travancore stands out in favourable contrast with the ideals and policies which found acceptance on the part of some of the other rulers of South India. For example the Sethupati of Ramnad who claims to be "a velaikkāran or servant to devotees, the chastiser of the wicked and protector of the righteous" was pleased to style himself "the breaker of the army of the Muhammadans and the destrover of their tribe".*

In the latter part of the eighteenth century the swords of Hyder Ali and Tippu Sultan made amends for the slow progress of Islam in Malabar. But forcible conversions did not bring Travancore within its ambit; for, Hyder failed in his attempt to invade the kingdom and his son paid dearly in making the experiment. The Travancore Muslims pursued their religious life unhampered by unnecessary restrictions, in conformity with the usages of the times. The Mahārājas exercised a power of control in the management of their religious institutions. permission of the Government was necessary for the opening of mosques, while the right of appointing the priests was reserved in the Sovereign himself. There are numerous old documents in the record rooms of the Government which show that, while the right to hereditary succession was recognised, no valid appointment could be made except on careful enquiry made by the officers of the Government.

^{*} Copper plate record of a Ramnad Sethupati; Kollam 945. Travancore Archaeological Series, Vol. V, pp. 16-17.

The Mahārāja's Neet alone conferred the authority.* When disputes arose regarding the right of the claimants, the civil courts were asked to adjudicate upon the matter and the Mahārāja gave his sanction for the appointment in such manner as was deemed fit. The payment of Adiyara fees was an essential pre-requisite to the exercise of valid authority. Thus the sovereigns of Travancore took as deep interest in the Muslims as well as in their Hindu and Christian subjects.

The Travancore Muslims are divided into Sunnis and Shiahs, the dividing principle being the same as in the rest of the world. There is, however, a great disparity in numbers, the Shiahs being 1,319 only while the Sunnis are so many as 351,955. In all that relates to the wellbeing of the Muslim community, both sections make conjoined efforts in all legitimate directions. But the difference in creed and practice is kept alive. The orthodox Sunnis believe that Abu Baker, Omar and Othman were the legitimate successors of the Prophet, while the Shiahs hold that Ali, the husband of Fatima, the only daughter of the Prophet who survived him, was the rightful heir to the Caliphate. They add a rider to the formula of Islamic faith that Ali was the Caliph of God. The Shiahs themselves are divided into various sects. But the ground of their faith is the same except as regards inessential particulars. The doctrines preached by Muhammad have maintained their ground against the assaults of later philosophic thought. "The Muhammadans have uniformly withstood the temptation of abusing the object of their faith and devotion to a level with the senses and imagination of man, 'I believe in one God and Muhammad the Apostle of God' is the simple and invariable profession of Islam. The honours of the Prophet have never transgressed the measure of human

^{*} Vide Neet dated 10-11-1017 M. E. re: the appointment of a Lebba to the Nemam mosque and the one dated 1-11-1027 M. E. pertaining to the Kakkalam mosque.

virtue but his memory is adored and his name held in veneration.

The Quran is imperative on the due observance of fasts. The most important of them are briefly described below:—

Ramaḍān. The Ramaḍán extends over 29 or 30 days according to the number of days in the month. It bagins as soon as the Ramaḍán new-moon is seen and ends with the appearance of the next new-moon. The fast is observed in all strictness. The Muslim abstains from fool and drink during day time throughout the prescribed period.

"The month of Ramadán is that in which the Quran was revealed, a guidance to men and clear proofs of the guidance and the distinction; therefore, whoever of you is present in the month, he shall fast therein, or whoever is sick or upon a journey, then (he shall fast) a (like) number of other days: Allah desires ease for you, and He does not desire for you difficulty, and (He desires) that you should complete the number and that you should exalt the greatness of Allah for His having guided you and that you may give thanks".* "The last prayer should, during Ramadán, be said at the mosque. It consists of 20 Rakkayats, and at Friday service there is a general congregational confession". The twenty seventh night of the fast is considered the most holy time and it is observed with scrupulous care; for it was on that night that the Quran is believed to have been sent down from Heaven. The prayers said on that night secure a remission of all sins. Giving of alms that night is believed to be an act of great religious merit. The fast concludes with a feast on the next new-moon.

Moharram. The month of Moharram heralds the beginning of the Muslim New Year. It was on the tenth day

[·] Holy Quran, Maulvi Muhammad Ali, pp. 82-83.

of that month that the grandson of the Holy Prophet Imam Hussain, and his brave band of soldiers terminated their earthly existence by acts of heroism at the battle of Karbala. The glorious memory of the martyrdom is cherished throughout the Muslim world. Some of the forms of demonstration which are in vogue among the ordinary people during this period are condemned by educated opinion and are slowly going out of fashion.

Muslim world. Literally, the word 'Bakrid' means 'the day of the sheep'. It was on this holy day that the Prophet Ibrahim proceeded in implicit obedience to the commandment of God, to sacrifice his "only darling son", Ismail, at the alter of truth. When Ibrahim was just about to apply the knife, there came a message from Allah that sheep might be substituted instead of his only affectionate son. Bakrid signifies the efficacy and the ennobling influence of sacrifice. It is in this auspicious season that the important function of the 'Haj' takes place at Mecca. The 'Haj' commences on the ninth day of the month and people from different parts of the world gather there in large numbers. The undertaking of this pilgrimage is enjoined on all ablebodied Muslims who possess the necessary means.

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CHAPTER XII.

CASTES AND TRIBES.

The word caste has obtained wide currency in the literature of sociology. It is of Portuguese origin and means purity. The Indian term is Jathi or Caste: What it is. Varna. Varna means colour used in the same sense as when Europeans speak of the coloured races. The word is also sometimes used in the sense of occupation. Sir Herbert Risley has described function or vocation. caste as "a collection of families or groups of families, bearing a common name, claiming common descent from a mythical ancestor, human or divine, professing to follow the same hereditary calling, and regarded by those who are competent to give an opinion as forming a single homogeneous community". Vincent A. Smith emphasises certain other aspects. He defines caste as "a group of families internally united by peculiar rules for the observance of ceremonial purity, especially in matters of diet and marriage". According to another definition caste is "a close corporation, in theory, at any rate, rigorously hereditary, equipped with a certain traditional and independent organisation including a chief and a council, meeting on occasion in assemblies of more or less plenary authority, and joining in the celebration of certain festivals, bound together by a common occupation; observing certain common usages which relate more particularly to marriage, to food, and to questions of ceremonial pollution; and ruling its members by the exercise of a jurisdiction, the extent of which varies, but which succeeds by the sanction of certain penalties and above all by the power of final or irrevocable exclusion from the group in making the authority of the community effectively felt".

The whole Hindu population of India is divided into classes or groups according to certain well-defined rules,

The rigidity of these rules has abated during the last several decades as the result of the new outlook fostered by the altered environment. But the conservative school of thought continues to maintain that caste is an ideal socio-religious institution, which, in its glorious days, favoured the growth of a spirit of mutual help among the Hindus and made them happy and prosperous. On the other hand, those imbued with the spirit of reform are loud in denouncing it as a curse to Hindu society. Between the two extremes there is a large section of people who take a middle course, affirming that the institution serves a good purpose though the incrustations which prevent the healthy growth and development of the community should be removed.

The beginnings of caste are traced by some scholars to the desire on the part of the fair Aryan immigrants to keep aloof from the Dasyus or the dark-Origin. skinned people. Others maintain that the institution owes its birth and development to the requirements of economic evolution unconnected with social or religious differences. New castes are being formed even now. Nor is the action of the usual forces confined to the Hindus. "Even Christianity has not altogether escaped the subtle contagion of caste. Almost everywhere in India a tendency has been observed on the part of converts from Hinduism to group themselves according to the castes to which they originally belonged". Difference of vocation has brought about the growth of different social groups among the Muhammadans as well. "The best illustration of the contagious influence of the fiction that differences of occupation imply a difference of blood is to be found". says Risley, "in the list of Mussalman castes enumerated by Mr. Gait in the Bengal Census Report of 1901."

For a considerable time after the institution of the caste system, change from one caste to another was

permitted. The Puranas and the Ithihasas afford numerous instances of members of one caste being At first not rigid. admitted to the higher castes. The Buddhist Jātakas mention instances of Brahmans living as hunters, trappers and wheel-wrights, and Kshathriyas earning their livelihood as cooks and potters. This negatives the recognition, in the early stages, of the ideas of superiority and inferiority based on the means for earning one's livelihood. Increased facilities for intercourse between the Aryan immigrants and the earlier inhabitants appear, however, to have accentuated the development of caste by preventing unrestricted social relationship between the two races. But the history of India proves beyond a doubt that neither the appeal to religion nor that to racial prestige succeeded in throwing ramparts and fortifications to prevent the normal play of human nature. "The men of the Aryan race", says Swāmi Vivēkānanda, "reserved for themselves, consciously or unconsciously, a good many privileges; yet the institution of caste has always been very flexible sometimes too flexible to ensure a healthy uprise of the races very low in the scale of culture.....In India, you cannot on account of your wealth, power or any other merit, leave your fellows behind and make common cause with your superiors-you cannot deprive those who helped in your acquiring the excellence of any benefit therefrom, and give them in return, only contempt. If you want to rise to a higher caste in India, you have to elevate all your caste first, and then there is nothing in your onward path to hold you back.....The names Brahman, Kshatriya etc., simply represent the status of a community in itself continuously fluctuating, even when it has reached the summit, and all further endeavours are towards fixity of the type by non-marriage, by being forced to admit fresh groups from lower castes or foreign lands, within its pale".

The rules devised by the Aryan law-givers may appear to be cruel and unreasonable. At the commencement there were no connubial or commensal restrictions. Change

of occupation, however, meant change of caste. Originally the king united in himself regal and sacerdotal functions. "The Rig Veda knew of a hereditary priesthood and nobility, and even refers to the threefold or fourfold division of the people." The Brāhmaṇa period saw the development of a full-fledged caste system due to differentiation of occupations growing in number and variety.* Before the time of Manu the supremacy passed to the Brahmans. The Vaisyas also appear to have undergone some kind of social depression. Nesfield is of the opinion that the fourfold division of caste was never actually in force in India except as a tradition. While the old rules regulating family life were perpetuated, the social groups were diversified by functions, religion, neighbourhood, and a feeling of consanguinity.

The social predominance of the Brahman appears in the Yajur and Sāma Vēdas. The Atharva Vēda is a further landmark in the development of caste; for the Śūdras are definitely marked out and placed in a category separate from that of the Aryans. Differences in social customs became more pronounced in course of time. The Brahman was to be invested with the sacred thread (Upanayanam) in the seventh year of age, the Kshatriya in the eleventh, and the Vaisya in the twelfth. Restrictions were also placed on the pursuit of professions and callings. The Brahman was prevented from becoming a shop-keeper as that would trench upon the rights of the Vaisya. He was forbidden to carry arms (which was the privilege of the Kshatriya) except in self-defence. He was also enjoined to avoid marital relationship with non-Aryan women. The Brahman who usurped any of the functions of the other castes was to be regarded as a Śūdra. There was differentiation in the ceremonies to be performed; for instance, the Sūdras were forbidden to have the Upanayanam performed. In course of

^{*} Hindu Civilization, R. D. Mookerji, p. 94.

time the functional basis of caste changed into a hereditary one. Its remarkable accordance with the philosophical doctrines of karma and transmigration helped the systematising legists to favour the formation of endogamous groups. Sects transformed themselves into castes. So great was the respect paid to generalisation that even the lower creation, animals and plants, were brought within the fourfold classification.

The Buddha found the caste system in full and vigorous operation. Frequent mention is made of the various castes in the works of his disciples. Buddhism made strenuous efforts to encourage the spirit of equality and fraternity by inveighing against caste distinctions but was obliged to tolerate their existence. The process in the development of caste is thus described by Romesh Chandra Dutt. "We see the dark cloud forming itself at the close of the Vedic period, we see it increasing in strength and volume in the Epic period. But it is only in the Puranic period which followed the Buddhist era that it threw an utter impenetrable gloom over a gifted but ill-fated nation". The Muhammadan invasion gave a further impetus to the maintenance of caste and its strengthening on account of the imperative necessity of self-protection and the preservation of race purity. "The system of caste brotherhood protected Hindus and Hinduism through many centuries of Muslim rule". Caste is considered to be a distinguishing mark of Hinduism. But the idea had no religious basis at the time of its inception as is clear from the teachings of the Upanishads, the Bhagavad Githa and other works of undoubted authority. It is noteworthy that as a principle the Śaiva, Vaishnava and the Vēdanthic schools of thought disapproved of the caste system as the Jaina and Buddhist creeds did. Caste was in full operation in the eighth and ninth centuries of the Christian era. The system appears to have become rigid in north India before the commencement of the Muhammadan invasions.

It is admitted by many western scholars that caste as an institution has not been without its advantages.

In the ancient world it preserved the ele-Its merits. ments of genuine knowledge and encouraged the cultivation of fine arts as tributary to dogma and "The laws of many useful inventions before the preservative institution of caste arose", says Comte, "must have suggested the need of it, and has proved its advantages afterwards in securing the division of labour which was here and there attained. No institution has ever shown itself more adapted to honour ability of various kinds than this polytheistic organisation, which often exalted into anotheosis its commemoration of eminent inventors who were offered to the adoration of their respective caste. In a social view the virtues of the system are not less conspicuous. Politically its chief attribute was stability. All precautions from attack from within and from without were most energetically instituted. Within, the castes were united by the single bond of their common subordination to the sacerdotal caste from which each derived all that it had of special knowledge and perpetual instigation. There never was, elsewhere, such a concentration for intensity, regularity and permanency of human power, as that possessed by the supreme caste, each member of which (at least in the higher ranks of the priesthood) was not only priest and magistrate but also philosopher, artist, engineer and physician... As to the influence on morals, this system was favourable to personal morality, and yet more to domestic; for the spirit of caste was a mere extension of the family spirit".

Monier Williams explained the advantage of the caste system in the statement that "in India caste has been useful in promoting self-sacrifice, in securing the subordination of the individual to an organised body in restraining from vice, in preventing pauperism". The French Missionary Abbe Dubois, the best part of whose life was

spent among the Hindus of south India, has left behind him a rich heritage of wisdom in his description of the Hindu caste. "I am persuaded", says he, "that it is simply and solett due to the distribution of the people into castes that India did not lapse into a state of barbarism, and that she preserved and perfected the arts and sciences of civilisation while most other nations of the earth remained in a state of barbarism". More recent writers like Sir William Hunter and Sir Henry Cotton are equally emphatic in their vindication of the caste system. The former has recognised its powers of resistance to external pressure and its plasticity "to adapt itself to widely separated stages of social progress and to incorporate the various ethnical elements which made up the Indian people", giving strength and permanence to the corporate body thus formed. The latter also has emphasised the important services which the caste system has rendered in the past—a system which "continues to sustain order and solidarity". Sister Nivedita declares that "caste is race continuity; it is the historic sense; it is the dignity of tradition and of purpose for the future". The list of admirers is a long one and shines with the names of many modern thinkers of eminence.

The literature of condemnation is equally abundant. According to James Mill it is a great political blunder, fatal to free competition, and subver-Its defects sive of individual happiness. Sir Henry overstressed. course of his survey of the laws of Maine in the ancient nations described caste as "the most disastrous and blighting of all human institutions". It is sometimes described "as a pontifical denial of the brotherhood of man". "The disorganisation of civil life in India", says Govinda Das, "left the country open for wave after wave of foreign conquest to sweep over it and submerge its independence finally and totally". These divergent opinions are the result of an one-sided survey of historical and social

facts in the light of particular theories. For more than two thousand years the population of India has been a strange medley of warring races and creeds. But it is not in India alone that humanity divided itself into different camps preferring communal advancement to national solidarity. The history of the Thirty years War, the repeated partitions of Poland and the interminable struggles in Austria Hungary were not due to the evils of caste. Nor can the present trouble in Europe be attributed to the militancy of caste organisations. On the other hand, in India caste did not always prevent the kings or emperors in making their conquests, in establishing systems of government broadbased on popular support. Common aspirations and the spirit of conquest made the Brahmans and the various classes of non-Brahmans in the Konkan and neighbouring places into a fighting nation which maintained its strength against the vast forces of the Mogul Empire and the military resources of Britain. It cannot, however, be denied that the institution of caste has its own evils as it prevents a union of hearts and deprives the country of united effort for its advancement. Human institutions. however good at the time of their inception, always degenerate with the efflux of time which brings on new conditions of life. The people of India of all races and of all creeds are now alive to the necessity of removing the barriers of caste in their endeavours to create a united nation.

The Aryans migrated to the south long after they settled in the north. They came in small numbers and peacefully penetrated into the territories occupied by the Dravidians. Gradually the races exchanged their social and religious customs and practices and fused together. According to Dr. Gilbert Slater, the main racial element in the Dravidian population is a branch of the Mediterranean

race. The Dravidians settled down in southern India and developed a civilisation of their own long before the Aryans came to India.

There is sufficient evidence in early Tamil literature to show that in pre-Āryan India the Dravidians who occupied the whole of southern India were a homogeneous race speaking a common language. They were, however, divided into certain classes according to their abode and occupation. "The ancient Tamils", says P. T. Śrīnivāsa Iyengār, "noted that the habitable parts of the earth's surface were divisible into five natural regions. They were:—

1. Kurinji, the hilly country, 2. Palai (the dry waterless regions), 3. Mullai, the wooded regions between the highlands and the lowlands, 4. Marudan, the lower courses of rivers, and 5. Neydal, the littoral tract which skirts the sea. Kurinji, the hilly region, was inhabited by the Kuravas (hunters), Pālai, the desert by the Maraver (fighting-men) and Kalwar (thieves), Mullai, the forest land by the Idayar and Kurumbar (cow-herds and shepherds), Marudan, the low-lying regions, by the Ulavar, the Karalar and the Vellalar (agriculturists), and Neydal, the littoral area, by the Paradaver (fishermen)." Thus, according to the occupations followed by the ancient Dravidians, they were divided into hunters, fighting men, herdsmen, agriculturists, and fishermen. They spoke the same language and belonged to the same race and had no caste. In course of time, the Dravidians came to be divided into three separate kingdoms under the rulership of three different dynasties, the Chelas, the Chēras and the Pandyas. The Chōlas were an agricultural people who lived in the valley of the Kāvēri. The Chēras were men of the hilly region extending from the upper reaches of the tributaries of the Kaveri to the west coast of south India. The Pandyas were the coast people (Paradavar) inhabiting the southernmost region. It appears that intermarriage was quite common between these tribes in ancient times.

The early Aryan settlers introduced the fourfold division of caste into Kěrala. The immigrants claimed superiority in caste and refused to recog-Caste system in nise any class of inhabitants of the land as Kērala. Brahmans. The ruling families were, however, recognised as Kshatriyas. The bulk of the people were stigmatised as Śūdras, while a few were recognised as Vaisvas. In course of time, the new-comers of the Namputhiri class adopted many of the customs and usages of the older inhabitants and imposed on them some of their own. The two cultures coalesced and became a homogeneous whole. Socially, a distinction was maintained between the different sections of the population. The Nampūthiris being the priestly order wielded great influence over the others. Society was divided into groups according to the nature of

The literature on caste in Kērala consists of several books, compiled in such a manner as to pass for authoritative works of antiquity. Tradition ascribes the creation of caste to Parasurama, the reputed leader of the first Brahman colony. The scheme attributed to him consists of sixtyfour divisions evolved by permutations and combinations. The Kēraļolpathi refers to the existence of Brahmans, Kshatriyas and Śūdras. The Śūdras comprised all castes of the non-Aryan groups. As in other parts of India, the social development in Kēraļa appears to have been a gradual The division of the people into four well-defined castes never existed in Kerala. The principle of treating each group following a particular occupation as a separate caste and of prohibiting intermarriage and interdining between them was introduced in Kerala by the Aryan immigrants. The Jathi Nirnayam makes mention of 72 principal castes.

They are:-

the occupations followed by the members.

⁸ classes of Brahmans,

^{2 &}quot; Nana Jathis,

18 classes of Śūdras.

6 , Artisans.

10 ,, Pathitha Jāthis,

8 " Nicha Jāthis,

8 " Extra Jāthis, etc.

The Brahman legislators appear to have so changed the matrimonial laws that in addition to the right of marrying in their own caste they secured the privilege of taking wives from certain other castes such as the Kshatriyas, the Nayars and the Ampalavasis. Dr. Hutton has drawn attention to the fact that "the woman taken from a matrilineal society and having ties of language, kinship, acquaintance and custom with that society, but expected to live according to strange and probably repugnant domestic and marital rules, could be effectively restrained to that end by cutting off her freedom of movement in and association with the society to which she belonged. It may appear at first sight that the case of a Nampūthiri Brahman married to a Nayar wife is a contrary instance, since she does not observe purdah at all, but the fact that in this case the children follow the matrilineal system supports the argument that purdah was necessary to the combination of a patrilineal system with the practice of taking wives from a matrilineal society. That purdah should exist so strongly in the case of the Nampūthiri women must be explained by the necessity for maintaining a barrier against the encroachment of a matrilineal environment and by the probability that the Nampūthiris already practised purdah when they first arrived in Malabar". .

In the Perumal period the Kshatriyas appeared in Kērala, and the Brahmans began to enter into conjugal relations with the females of certain castes. The union of Kshatriyas with Nāyar women gave rise to the caste of Sāmanthar, who by caste are Nāyars differentiated by social position and observance of hypergamy with the

Nampūthiris. The castes of Kēraļa thus grew from a racial, marital and functional basis.

Placed in peculiar circumstances, the people of Travancore like their brethren in the other parts of the Kerala country persisted in the preservation and protection of the ancient customs. But a change is rapidly taking place. Caste barriers are breaking down. This is not confined to the lower castes or the intermediate classes. The stirrings of a desire for social reform have permeated the whole fabric of society. Among the younger section of the Namputhiris, imbued with the spirit of the times, the feeling is growing stronger and stronger for the radical reform of their social and religious practices, and the elders are slowly withdrawing from the rendezvous of opposition. The social reform movement is now a common feature of all the castes and communities in Travancore. Most of them have organised associations on caste or communal basis and are carrying on vigorous propaganda for their betterment. The Nayars were the first to organise a caste association for these purposes. The Ilavas, the Namputhiris, the Kshatriyas, the Christians, the Muslims and other communities have also formed organisations so that at present there is hardly any caste or community in the State without an association of its own for self-advancement in social and political spheres.

The fusion of sub-castes is one of the chief planks in the programme of all caste associations. Numerical strength being a prominent title to political importance, the various communities leave no stone unturned to increase their number. "Some of those castes who have made rapid progress in social reform", says the Census Commissioner, "have removed all taboos on intermarriages and interdining between members of different sub-castes which were punctiliously observed some twenty five or thirty years ago. The same rule applies to all the communities large or small.

While the census returns of 1901 showed the existence of so many as one hundred and sixteen sub-divisions among the Nāyars, the census of 1931 mentions only two. The Nampūthiri Yōgakshēma Sabha is also attempting to effect a similar reform among the Malayāla Brahmans. Similarly, among Īlavas and many other castes the numerous sub-divisions returned in the census of 1901 have all disappeared. A movement has been set on foot to bring about the fusion of castes following the same or similar occupations. The attempt to unite the Arayas, Marakkāns, Mukkuvas, Nulayans and Vālans, who follow the traditional occupation of fishing, into a homogeneous community has been partly successful. A similar attempt is being made for the amalgamation of the washermen castes, Vaṇṇāns, Maṇṇāns and Neriyans under the common name of Varṇavar."

There is also a tendency on the part of some of the castes to assume new names. For example, the artisan classes comprising goldsmiths, blacksmiths, carpenters and others, who were included under the common name of Kammāļas, desire to change it into Viśwakarma or Viśwabrahman. They wear the sacred thread to emulate the Brahmans. The Shāṇārs like to call themselves Nādārs. The Parayas give themselves the name Sāmbavar, while the Pulayas are desirous to be called Chēramar. In south Travancore the Kāvathis who are barbers returned themselves in the census of 1921 as Chakaravars. The Chakaravars resented the step and adopted the name Kēraļamudali in 1931.

Even the conservative classes are alive to the necessity of this change which shakes all hard and fast rules and effects greater social amity. Interdining has lost its terrors, and recently women of all castes and communities sat together at dinner at the time of the All India Women's Conference held at Trivandrum under the inspiring presidentship of Her Highness Mahārāṇi Sētu Pārvathi Bāi. Intermarriages between members of different sub-castes

are so numerous that the old rule of prohibition is being entirely forgotten. While marital relationships between the members of different castes have ceased to be a novelty and are fast securing the public approval of the various communities, the pace of progress would have been more rapid had it not been for the rights and privileges which appertain to the various social groups as distinct groups in the body politic. The backward classes, however, feel that if they allow themselves to be classed with the advanced communities they will lose their political privileges by This result is absorption into the more numerous groups. one which all castes seem equally anxious to prevent. the same time the desire to rise in the social ladder is becoming more and more intense. The grading of castes according to arbitrary standards based on birth and the delineation of certain classes as lower than others have engendered a feeling of resentment on the part of the longsuffering communities. This is quickening the pace of But the instances are numerous which social reform. show that while the members of one caste wish to rise to the level of those above them they are equally anxious to claim superiority over those that are below them. deeply is the idea of caste ingrained in society that even among the Christians, especially in some sections, caste rules are being observed. "Even Christianity has not altogether escaped the subtle contagion of caste", says Risley.* backward Christians fear that they will be swamped by the advanced sections of the Christian community in the struggle for political privileges and proportionate representation in Government Service, if they do not stand out as independent units. The Muhammadans recognise no caste, but hereditary class distinctions based on race are still in vogue. The Pulayas do not interdine or intermarry with the Parayas. Social opinion among them does not permit a member of the community to select a spouse from another

^{*} People of India by Sir H. Risley, Page 79.

caste. This feeling keeps the different castes of the Hindu community in different compartments. It must, however, be recognised that, in no state or province in India, have the barriers between the castes been reduced lower than in Travancore. His Highness the Mahārāja is quickening the pace of reform taking care at the same time to preserve the old moorings. But caste still exists.

The total number of Hindu castes returned in the last census is nearly 500; but only 77 of them have been specifically mentioned in the Census Report. The aggregate number of persons of the remaining 423 castes taken together is only 3,831. Many of these are "foreigners". viz., labourers from the other side of the ghats. among the seventy-seven castes regarded as important there are several whose membership is so small that they are negligible. Twentytwo of the castes can boast only of less than thousand souls each, fourteen below five hundred, seven below two hundred, and three below one hundred. groups, often a single family, are seen to be desirous of perpetuating a distinct existence. There is at least one instance in which a caste has entirely ceased to exist as a separate caste, viz., the Aivanavars, who have all of them become Christians in the course of two or three generations. Certain other castes continue to maintain their distinctiveness though the bulk of the people who formed the caste in the previous censuses have embraced other religions.* But as memories of caste take a long time to die out, and for the further reason that the habits of certain groups, however small, are of interest, a few details are set forth below in alphabetical order.

The Various Castes.

Adi-Dravida is a caste of recent origin, the result of a movement among the members of certain backward

The majority of the individuals constituting certain castes like the Bharathar, Ampattans, etc., have become Christians. As Christianity does not recognise the caste system, no attempt is made here to give the details relating to them.

communities to raise their social status by dropping the vestiges of inferiority kept alive by old associations. They are drawn from various classes with similar outlook envisaging complete fusion in the times to come. Their number is only 966.

The Alavans are the descendants of the workers in salt-pans, who were brought down from Madura three or four centuries ago to work in the salt-pans in south Travancore. They are found mainly in Manakudi and Vāriyūr. They are makkathāyis. Polygamy is not prohibited.

Ampalavāsi is a generic name applied to a number of castes whose hereditary occupation is service in the temples. There are several sub-divisions to each of which are assigned different functions.

The following sub-sections deserve mention:

Atikal, Pishāroti,
Chākyār, Pothuvāl,
Kurukkal, Pushpakan:
Nampiḍi, (a) Brāhmaṇi,
Nampiyār, (b) Nampīśan,
Nāṭṭupaṭṭar, (c) Pūppaḷḷy,
Plāppaḷḷy, (d) Uṇṇi,
Vāriyar.

The Atikals are said to have been Brahmans originally. They are supposed to have undergone social degradation by officiating as priests in certain temples dedicated to Bhadrakāļi.

The figures within brackets indicate the strength of the community in the State according to the census of 1931.

The Chakyars are Prathilomajas, which means the issue of the marriage of a female of a higher caste with a male of a lower caste. They are said to Chākyār. be the descendants of a Kshatriya father with a Nampūthiri mother. The Chākyār's occupation is the narration of puranic stories in temples vivified with eloquent declamation and appropriate action. The performance is known as Chākyār Kūťhu. Frequently the story is but a pag on which the Chakyar hangs dissertations and admonitions. Practical jokes give a zest to the performance. Men and measures are criticised without reserve, not directly of course, but by introducing current matters in hints and suggestions.

The Kurukkals are probably of Tamil origin. In some temples they perform priestly functions. It is said that in early times the Vāriyars and other recog-Kufukkal. nised temple servants of Malabar were not available for temple service in south Travancore. Twenty Madakkar or families of Kurukkals are believed to have been brought down to Travancore from the Tamil country. The Kurukkals still observe many of the ceremonies of the east coast Brahmans though they have generally adopted those common among the Malayalis. There are some families in south Travancore who speak Tamil.

The Nampidis are of two classes, those who wear the thread and those who do not. The former have their own priests, while the latter utilise the Nampidi. services of the Ilayathus for the purpose. The women are generally married to their own castemen. But the Namputhiris also may marry them. They follow the marumakkathayam system of inheritance.

The term Nampiyar is applied to three classes of people, viz., Chakyar Nampiyar, the Thiyattu Nampiyar 105

and the Pushpaka Nampiyār.* The women are called Nampiyār. The males of the two castes, Chākyārs and Nampiyārs, interdine but not their women. The Nampiyārs assist the Chākyārs in the kūt'hu performance by beating the drum. The Nangyārs sometimes take part in the performance.

The Pattarunnis are supposed to be the descendants of a union between a Nampūthiri woman and a Tamil Brakman. The males wear the sacred thread.

Nāttupattar or Pattarunni.

They have their own priests though the purification ceremonies are performed by Nampūthiris. The Pattarunnis are permitted to recite the Gāyathri. They follow the marumakkathāyam law of inheritance.

The Plappallies are a caste peculiar to Travancore.† They do not enjoy any of the privileges of the Ampalavasis.

The males are invested with the sacred thread in the sixteenth year. Formerly the Ilayathus officiated as their priests, but now the service is performed by Nampūthiris or Pottis. The girls have the thālikeṭṭu celebrated, the thāli being tied by the Āryappaṭṭar. The women marry Brahmans. The Plāppaḷḷies are marumakkathāyis.

The Pisharotis are generally temple servants believed to be the descendants of the Buddhist or Jaina sanyasis who entered the Hindu fold on the decline of those religions. They are called Pisharotis in the north and Alathis in the south. They do not wear the thread. Their marriage customs are somewhat

^{*} The term Nampiyar is also applied to certain aristocratic Nayars in Malabar.

[†] There are only one or two families.

like those of the Brahmans, Pāṇigrahaṇam or taking the right hand of the wife in that of the husband being an important item. They are generally marumakkathāyis, but by special contract properly may devolve according to the rules of makkathāyam. Freedom of divorce is allowed. They are conservative in their habits. Their purificatory ceremonies are performed by the Nampūthiris who, however, decline to pour the holy water over their heads. What is done is to pour it over the roof of the house from which it is allowed to drip over upon the Pishāroti. Of all the Ampalavāsis the Pishārotis bury their dead.

There are two classes of Pothuvāls, the Mālappothuvāls (garland makers) and Chendappothuvāls (drummers).

Pothuvāl.

They do not interdine or intermarry with the Pishārotis or Vāriyars. They follow the marumakkathāyam law of inheritance.

Four sub-castes are comprised under the general heading Pushpakan, a name based on their traditional occupation of preparing garlands for the Brāhmaņi, Nampisan, Pappally temples. Some sub-castes are Pushpakans and Unni. by status, others by occupation. Some of them like the Nampisans used to keep gymnasia and schools of training and teach fencing and other athletic The occupation of the Brahmani or Daivampadi exercises. is to sing in temples and perform certain ceremonies. The Thiyattunnis are said to be Brahmans who suffered degradation on account of their calling. Their traditional occupation is thiyattu, i. e., making the figure of Bhadrakali on the floor and propitiating her by singing songs and performing pajas. Their services are often requisitioned in caste Hindu families. They wear the thread. A widow cannot contract sambandham alliance with one of her own caste though she is allowed to do so with a Brahman. Diverce by mutual consent is permitted. Priestly services are rendered by members of the caste, but the Nampūthiris officiate in purification ceremonies.

They are endogamic. Divorce is permitted and a divorced woman can accept a Nampūthiri Brahman as her husband. For all usual ceremonies they select priests from their own caste. The Nampūthiri Vaidikan is the deciding authority on matters of caste. The Brāhmanis, however, have llayathus for priests. The Pushpakans generally follow the marumakkathāyam law of inheritance, but there are makkathāyis also among them.

The Vāriyars are found mostly in the taluks of Kārt'hikapally and Kunnat'hunād. They generally follow the marumakkat'hāyam law of inheritance.

Vāriyar.

Among the members of the Onāttukara sub-division, inheritance may be through both males and formalist the sustant followed depending on the matters of the sustant followed depending on the matters of the sustant followed depending on the sustant followed depen

sub-division, inheritance may be through both males and females, the system followed depending upon the nature of the sambandham ceremony, which may be of two kinds, the ordinary sambandham and the same ceremony accompanied by, what is called, Kutivaikkal (settling in life). In the latter case the woman is taken to the husband's house, and she becomes a member of the family. Her children inherit the family property of the father.

The Ampattans form one of the barber castes. There are two sections of this caste, one speaking Tamil and the other Malayālam. In south Travancore they are known by different names, such as Kuṭimakkal, Nāśuvan. Nāviṭan, Panḍithan, etc. They are an endogamous community. Divorce is allowed. The party desiring separation has to pay a sum of money to the other. In the Pathanāpuram taluk there is a class of barbers who speak Malayālam but are of Tamil origin. They are called Pūlans. Of the total number of 742 persons returned under this class only 305 are Hindus.*

*The Malayāli barbers are dealt with under the heading Vijakkithals Nāvar.

The Arayans are a fishing community found chiefly in Karunagapally, Karthikapally and Ampalapula taluks in

central and north Travancore. Polygamy and marriage of widows are not prohibited. Catching and selling fish and weaving nets are their traditional occupations. A large body of Arayans embraced Christianity in the 16th century. The converts go by the name of Arasar. Closely allied to the Arayans are

embraced Christianity in the 16th century. The converts go by the name of Arasar. Closely allied to the Arayans are the Marakkans, Mukkuvans, Nulayans and Valans, who are also fishermen castes living in coastal areas. Of late the educated younger generation of these castes has been carrying on propaganda to unite and bring them all under the common name Arayan. All these sub-divisions mentioned above follow makkathāyam.

The Bharathars formerly known as Paravars are also a fishing community inhabiting the coastal tracts of south

Bharathar. Travancore. They are makkathāyis. A

(275) great many of them were converted to Christianity in the 16th century.

The Brahmans in Travancore fall within certain well defined classes. These are:—the Malayāli Brahmans, Pancha Drāvidas and Pancha Gaudas. Under Brahmans. (68,072) the first group come the Nampūthiris, Pōttis, Aryappatṭars and Tulu Emprāns. The Nampiyathiris and Ilayathus maintain that they are like the Malayāli Brahmans. They also have a high place in the scale of Malabar castes.* The Nāyars and others among the caste Hindus eat the food prepared by them and allow them to marry their women. At the same time the Pancha

Nampiyāthiris and Ilayathus are admitted to the Santhi school to be trained as priests in certain temples. No non-Brahman has hitherto been admitted to that institution. However, I feel constrained to adhere to the classification in the Census Report and other Government publications.

Gauda Brahmans are treated differently even in matters of interdining.

The Pancha Drāvidas include the Tamil, Andhra, and Kanarese Brahmans. The Gauda Sārāswathas come under the denomination Pancha Gaudas. The groups differ in religious practices and language. The Nampūthiris are believed to have immigrated mainly from the Telugu country. They form an exclusive caste and are not found anywhere outside Kerala. The Drāvida Brahmans were originally colonists from the tracts east of the ghats. The former home of the Gauda Sāraswathas was the Konkan. Their original home is said to have been on the banks of the river Saraswathi.

of the edifice of caste in Kērala. To this class belong most of the jennies. From very early times Nampūthiris. they have been anxious to prevent the dismentation of their lands. The eldest son alone was permitted to marry in the caste, the younger members consorting with women belonging to certain other communities. The extinction of the family has been prevented by adoption.

There are eight sub-divisions among the Nampüthiris.

(1) Thampurākkal. In this class there are only two families, the Aluvanchēry and the Kalappanchēry. They have the highest position among the Malabar Brahmans and command the greatest respect.

- (2) The Idhyans. There are eight families in this class. They are believed to concentrate their attention to the study of the Vēdas and the practice of acts of devotion.
- (3) Visishta Nampī thiris. They are of two classes, Agnihothris and Bhattathiris. The former are ritualists and the latter religious teachers. Under this head come the Vadhyāns of Trichūr and Thirunāvāi, the six Vaidikans and the Smārthas.

- (4) Sāmānyas. They have no religious functions allotted to them except the study of the Vēdas and the performance of the usual ceremonies.
- what a former Census Commissioner called an 'inexcusable misuse of language.' They are as much respected in practice as the members of any other class. The Ashtavaidyane and the Yāthrakalikkār come under this section, the former of whom follow the profession of medicine. The latter formerly followed that of arms.
- (6) £āṭagiasthas. (7) Pāpishtas and (8) Samhothikar. These classes are considered to be of inferior status.

Another division of the Nampūthiris is into Othullavar, and Othillāthavar. The former are entitled to recite and propound the Vēdas and perform the sixteen ceremonies (Shōḍaśa Kriyas). The latter, on the other hand, can neither study the Vēdas nor superintend the performance of the Shōḍaśa Kriyas. To the latter class belong the Śāpagrasthas and the Jāthimāthras.

The Namputhiris differ from the Brahmans of the east coast in their manners and customs. They follow all the sixty four prescribed rules of conduct strictly, while the other Brahmans observe only some of them *

The Nampūthiri women are styled Antharjanams, i.e., those who keep inside the house. They seldom move out of their house, and, when they do, they are invariably accompanied by a maid servant with a cadjan umbrella. They have, however, begun to give up their gosha habits and some of them are even so forward as to address public meetings.

The Namuathiris like their brethren of the east coast belong to different suthras and gothras and follows

^{*} For a detailed list of these rules of conduct see K. P. Padmanatha, Menon's History of Keraja, Vol. III.

Bödhāyana, Āpasthambha and Kausika.

Caste government. The best known göthras are Kāsyapa, Bhārgava, Bhāradwāja, Vāsishta and Kausika. A few of the Nampūthiris are Sāmavēdis or Yajurvēdis, but the majority of them are followers of the Rig Vēda. The Nampūthiris owe spiritual allegiance to two ecclesiastical heads, the Vādhyāns of Trichūr and Thirunāvāi Yōgams. Both the Yōgams own large estates. All Nampūthiris belong to one or other of the two Yōgams. Besides the two Vādhyāns there are also six Vaidikans and six Smārthas. The Vaidikans are men of great learning and ability and are well posted in all matters relating to caste as laid down by the Smrthis and established usage.

Among the Nampūthiris post-puberty marriage is permitted. There is no social stigma even if a Nampūthiri woman dies unmarried. In the old days women accused of sexual immorality had to submit to an enquiry called the Smārtha Vichāram. The men who were accomplices were also punished with excommunication like the principal offender. The Nampūthiris understand the spirit of the times and are glad to fall into line with the most progressive communities.

There are three classes of Pottis corresponding to the three periods of their respective settlements in the country.

The first class comprises the descendants of the earliest settlers. The Sthānathil Pottis, the traditional trustees of Śrī Padmanābha's temple, and the Pathillathu Pottis would come under this division. Under the second class come the later immigrants from the Kanarese country who have become assimilated with the general body of Namputhiris in manners and customs. These are the Thiruvalla Desis so called because their first home in Travancore was in or near Thiruvalla. The grāmams of Chengannur and Venmani are the two important

centres of Thiruvalla Desis. The Mampally Pandarathil known also as the Vanjipula chief is the head of the latter. The third class of Pottis are the immigrants from South Canara. They are also called Emprans.

The Pottis have the same ceremonies as the Namputhiris. Their caste government is the same. The Vaidikans and Smarthas exercise control over them in social and religious matters.

The term Āryappatṭars means 'superior Brahmans', but their position in the scale of caste is below that of the other Brahmans. They are found in the Karunāgappally taluk. Their number at the last census was only 95. They are permitted to interdine with the Nampūthiris. The males marry Pōti women, but the latter thereby fall in rank and status. The Āryappatṭars follow the Kērala system in all their rites and ceremonies. The Nampūthiri Vaidikans.are their guides and referees in matters of caste government.

Closely allied to the Aryappattars are the Pattathiyars in the Thodupula taluk. They number only eleven souls.

The non-Malayali Brahmans as already observed are divided into two classes; Pancha Drāvidās and Pancha Gaudas. The Tamilians who belong to the I he non-Malayali Pancha Drāvida class constitute the lar-Brahman. gest section and were the earliest to come. (39,985)They include the Mukkaniers, Choliers, and the Thalavakars, who unlike the other Brahmans keep a tuft of hair on the front of the head. The Tamil Brahmans are classified as Smarthas and Vaishnavas according to the religious teachers they venerate and as Rig Vēdis, Yajur Vēdis and Sāma Vēdis according to the Vēdas they follow. They are also classified as Vadama, Brahaccharanam, Ashtasahasram, Sankēthi, Vāthima, etc. The Iyengars (Sri Vaishnavas) are sub-divided into Vadakalais and

Thenkalais. The Pancha Drāvida Brahmans in Travancore have the same religious practices, customs and ceremonies as their brethren in the neighbouring districts of the Madras Presidency. Though small in numbers, the Drāvida Brahmans, especially the Tamilians, have always been an important community. The Telugus, the Maharāshtras, the Kanarese and the Konkanastha Brahmans were mostly later immigrants. The first three classes together number only 2,055. The number of Gauda Sāraswathas is 9,163. They are found mostly in the taluks of Parūr, Shērthala and Ampalapula. They usually tack on to their names such honorific titles as Prabhu, Shēnoi, Kammath, Mallan and Rao.

The customs and usages of the non-Malayāli Brahmans are more or less similar. Marriages between Sapindas and Sapravaras are not permitted. They are as a rule monogamous. No divorce is allowed for the woman. She can, however, repudiate her husband when he becomes an out-caste but she is not permitted to remarry. They are governed by the Hindu law of inheritance.

The Chackaravar are a community of weavers and traders found in the taluks of Agasthīswaram, Kalkuļam and Viļavancēde in south Travancore. They were known as Saiva Chetti Velļāļars. In the census of 1911 the Chackaravar were called Kāvathis, a term which denoted a class of barbers. The Kāvathis, with a view to raising their social status, began to assume the name of Chackaravar. This was not liked by the latter who are weavers and merchants. They therefore assumed the new name of Kēralamuthaly at the census of 1931. They follow the makkathāyam law.

The Chakkiliyans are a class of people whose traditional occupation is working in leather. They are supposed

Chakkiliyan and Chemman (6,188) The Chemmans are an indigenous class of leather workers.

Both these classes follow the makkathayam law of inheritance.

The Chavalakkārans are a fishing community living in the inland parts of the country. Some of them are drummers. The Chavalakkārans in the Shankōtta taluk are called Vanniyans. They follow the makkathāyam law.

The Chāyakkārans are mainly found in south and central Travancore. Both polygamy and widow remarriage are permitted among them. Inheritance is in the male line.

The word Chețți is derived from Śrēshți (chief merchant) and is used to indicate a separate caste. members of certain other communities, such as weavers and Vāṇiyans, also use Chetti. (17.422)There are several subthis title now. divisions of Chetțis such as Kōṭṭār Chetṭis, Parakka Chețțis, Iraniel Chețțis, Thelunka Chețțis and Perurkada Chettis including Śrī Pandāra Chettis. These sub-divisions are named more or less after the places where they are chiefly found. They differ from one another in their traditions and do not generally intermarry. The Chettis are Tamilian in their manners, customs and modes of dress except in Quilon, where they resemble the Malayalis in these respects. Remarriage of widows is permitted in Kalkulam, Trivandrum and Shenkotta. Some of the subdivisions are polygamous. Trade and agriculture are their traditional occupations. They follow the makkathayam law, some of the Śrī Pandāra Chettis alone being marumakkathāyis.

The Ilavāṇiyans are found chiefly in Thōvāla, Agasthīśwaram, Trivandrum and Shenkōtta taluks. In Śhenkōtta they call themselves 'Sēnakula Vellavāṇiyan. (6,411) lālar'. Their mother tongue is Tamil. As a class the Ilavāṇiyans are dealers in vegetables. They follow the makkathāyam law.

The Ilavas form a very important caste. Sections of the community have been known in certain parts as Chōvans.

In Malabar they are called Thiyas. llavan. name 'Chovan' or 'Chevakan' appears to (869,863)have been derived from the word 'Sēvakan' (servant), and the term 'Ilavan' from Ilom which means Ceylon from where they are believed to have come. * Caldwell is 'tolerably certain' that the Ilavas and Thiyas are descendants of the Channar colonists from Ceylon. Sadāsiva Iyer, a former Chief Justice of the Travancore High Court, found great significance in the honorific title of 'Channars' assumed by certain important Ilava families. There is a Singhalese tradition which has a bearing upon the immigration of the Ilavas. It says that the Cholas invaded Ceylon in the third and second centuries B.C. A little later the Singhalese retaliated and succeeded in taking possession of a strip of the Indian coast. But they seem to have been eventually obliged to evacuate. The fact, however, remains that there was considerable intercourse between the two The tradition locally current regarding the countries. immigration of the Ilavas is as follows:- "An Ilathunad raja who visited Kerala found the land suitable for the cultivation of the coconut palm and requested one of the rulers of Kērala to give him some land for the purpose. This request was granted and four men were sent from

^{*} The Land of the Perumals, Day, p. 319.

Ceylon to cultivate the coconut palm in Kēraļa. As the King of Īļathunād did not get any return from the coconut garden in Kēraļa, he recalled his men. Their wives and children were left behind and they came to be known as Īļavas". Dr. Thurston supports this view.

The immigration of Ilavas must have taken place in the early centuries of the Christian era when Buddhist missionaries from Ceylon visited Kēraļa and made sustained endeavours to spread the faith. It is probable that the Ilavas must have been occupying a rather prominent position in the land in the heyday of Buddhism. There is perhaps no other community in Kēraļa which entertains so much veneration to the teachings of that faith as the Ilavas. In course of time, however, they appear to have accepted the theology of Hinduism and fallen into line with the other inhabitants. It is possible that as they were a new people in the fold of Hindu Society they came to be regarded as of inferior caste. *

Numerically the Ilavas occupy a prominent place in the population of the State. Linguistically they are divided into two classes, viz., those who speak Malayālam and those who speak Tamil. The latter are few in number and are found only in south Travancore. They are Tamilian in habits and dress. Based on the system of succession and inheritance the Ilavas of Travancore are divided into three distinct classes known as Makkathāyīs, Marumakkathāyīs and Misravalis. The Marumakkathāyīs form the bulk. But inheritance is becoming more and more patrilineal, especially after the passing of the Ilava Regulation in 1925. Re-marriage of widows is allowed.

The Ilavas are largely engaged in the cultivation of the coconut palm and in the industries connected with its produce. They are generally agriculturists, while a few earn their livelihood by other forms of manual labour, such as weaving and rowing country boats. Their women

^{*} Malabar Manual, Logan, Vol. I, p. 257.

are very dexterous in the preparation of coir fibre and the manufacture of coir-ropes and mats. Toddy-drawing which was the traditional occupation is being discouraged. In the old days when wars had to be fought the Lavas enlisted themselves as soldiers in large numbers. Some families cherish memories of military leadership.

The position of the Ilavas fifty years back was one of some inferiority in the social scale. So was their political importance. "The persistent and self-less efforts of Śrī Nārāyaṇa Guru Swāmy, the spiritual leader of the Ilavas, coupled with his great organising capacity enabled him and his disciples to overcome all initial difficulties and pave the way for the establishment of the S. N. D. P. Yōgam, which, with its numerous branches working in different parts of the State, watches the interests of the Ilava community and works for their social, moral, educational, material and political advancement."

The Ilavathis are the barbers of the Ilavas. They follow the same law of inheritance and the same customs. The majority of them have given up their traditional occupation and are following other pursuits.

The Hayathus resemble the Nampūthiris in many Ilayathu and respects. Priesthood is their general Nampiyāthiris occupation. There are two classes among (2,383) them:—The Ounām Paiisha or those of the first order, i.e. those officiating for the higher classes of

The question whether I ayathus and Nampiyathi is are Malaya i Brahmans has not been authoritatively decided. The classification in the Census Report is being provisionally adopted here. The community has been decreasing in numerical strength. "This decrease is apparently caused by some of them being returned as Malaya i Brahmans and thus included under Nampūthiris. (Vide Census Report, 1931, Vol. I, p. 373).

Sudras, and the Rantom Parisha or those of the second order, i. e., those officiating for the lower orders. The two classes do not intermarry. The males interdine but not the females. The members of the second class are not permitted to take part in the coremonies of the first. Generally the eldest member of a family marries in the caste, the junior members marrying in other castes as sanctioned by custom. But endogamy is becoming the rule. The women may marry either before or after puberty. Neither widow-marriage nor divorce is allowed. The Ilayathus follow the makkathāyam system of inheritance. The Nampiyāthiris in central Travancore are allied to the Ilayathu. They claim precedence over the Ilayathus in social position.

The Kaikolans are a caste of weavers who reside in Kōṭṭār and its suburbs. They call themselves Muthalis.

But the title has no special significance as indicating their caste. They follow the makkathāyam law. Widow remarriage is not permitted.

The Kākkālans are an indigenous tailor caste of Malabar, which has been reduced to a wandering community. They are divided into four clans of which only two are found in Travan-Kākkālan. (1.666)They correspond to the Kākka Kuravans of the Tamil country. They speak Malayalam, but have also developed a dialect of their own. Girls are married before puberty. A bride's price has to be paid. The Kakkalans were 'conspicuously' polygamous, the wives supporting themselves from the fees of palmistry, tattooing, etc. A widow may remarry her brother-in-law, provided he is older in age. If she chooses another, her original bride's price must be returned to the family of her deceased husband. Divorce is common. The Kakkalans are makkathāyīs. At the last census there was a move on the part of the younger generation to change the caste name into Siddhanar.

"The Kammalas of Malabar and the Tamil districts must have descended from the same stock of Naga-Dravidian artisans mentioned in early Tamil literature Kammā lan and inscriptions". They are also known (208.441)by the name of Viswakarmas. In Travancore, they are of two classes, the Malayalam speaking section and the Tamil speaking section. They are divided into five occupational classes according to the material on which they ply their art. They are Asari (worker in wood), Thattan (goldsmith), Kallan or Kallasari (worker in stone), Mūśāri, (brazier or coppersmith), and Kollan (black-smith). Most of the Kammalas now wear the sacred thread. They are mainly makkathāyis, though the Villasans found in the Nedumangad taluk follow the marumakkathavam law. In addition to the above are the Thacchans or the Irchakkollans whose work is to fell trees and saw timber. These latter are the oldest of the Kammalas in Travancore. They are supposed to be of an inferior social position. Large numbers of them sought conversion to Christianity. They are numerically small. The main divisions generally intermarry and interdine. Monogamy is the rule and polygamy the exception. A second wife is taken, even while the first is alive, in certain cases. Polyandry is prohibited. Girls are generally married after puberty. Widow marriage is forbidden, nor is divorce allowed among the makkathāyis.

The Kaniyans are of two classes:—Kaniyans proper, who follow the profession of astrology, and Thinda Kaniyans, who are engaged in making (15,652) umbrellas of cadjan. Among them property descends in the male line.

The Kathikkārans form a small community of blacksmiths found in Marungūr in the Agasthīśwaram taluk. Formerly they were engaged in the manufacture of steel and in
the smalting of iron ore obtained from a mine at Vannāthumkulam near Suchīndram. They are makkathāyis.

The Kāvathis are a barber caste functioning to the Nādārs. There are four classes among them. A man cannot marry from his own clan. Women retain (2,293) their clan after marriage, along with their children. Property devolves in the male line.

Chackaravar. A large number of Kēralamuthalis have embraced Christianity, but it is a special feature of this community that both the Hindu and the Christian sections stand united in all social and political matters. Of the total number of Kēralamuthalis returned at the last census 1,423 were Hindus and 1,583 Christians.

The Krishnanvakakkar are confined to south Travancore. Originally pastoral, they have become mainly agri-Tradition says that they precultural. sented to the then king of Travancore an Krishpanyakakkār. image of Śrī Krishna which they had (12,032)brought with them from north India, their original home. This the Maharaja commanded to be placed in the Thiruvāmpādi temple (inside the Padmanābhaswāmy pagoda). They were permitted to reside at Vanchiyur in Trivandrum. During the days of their pollution occasioned by the birth or death of near relatives they pleaded that the image which they had brought with them was also affected and that during such days the daily rujas should not be performed. The puja having been hindered frequently on this

account, they were asked to remove to a place separated from Trivandrum by at least three rivers. They therefore settled at Iraniel and Kalkulam. There are grounds to believe that these people belong to the Yadava tribe.

There are two divisions of this caste, one following the makkathayam system of inheritance and the other the marumakkathavam. The former follow the Vellalas in dress and ornaments, while the latter follow the Nayars. Among the makkathāvi section marriage is compulsory, though it can take place after puberty. The widow often becomes the wife of the younger brother of the deceased husband. The younger brother takes her also even if he has already got a wife, especially when the widow is young. The issue of such a union become entitled to the property of the deceased. But they succeed to the natural father's property only when there is no offspring of the duly solemnised marriage, the legitimate issue of the deceased having full rights to that of their natural father, provided the latter has no offspring by his duly married wife.

Attempts are being made to bring about a fusion between the two sections of the community.

The Kshatrivas are divided into two sections--Malayāli Kshatriyas and other Kshatriyas. The Kshatriya. Malayali Kshatriyas include Koil Thampu-(3,673)rans, Rajas or Thampurans, Thampans and Thirumulpads. There are some families of rajas who do not wear the sacred thread, like those of Vatakkumkur. The Samanthas who claim to be Kshatriyas comprise the Adivodis, Umhyathiris, Pandalas, Eradis, Vellodis and The total number of Samanthas in Tra-Nedungadis. vancore is only 97. Of these the Unnyathiris and the Pandalas form the major portion. The total number of Malavali Kshatrivas, according to the last census, was 2,936, Thiruvalla, Vaikom and Māvēlikara being their chief centres.

The Koil Thampurans form a distinct community. There are ten such families of Köil Thampurans in Travancore, viz., those of Kilimanur, Changa-Köil Thampufans. nāssēry, Ananthapuram, Pallam. Chemprol. Cherukol, Grāmam, Pāliyakkara, Kārāima and Vaṭakkēmatom. Of these the Kilimanur family from Kövilakam was the earliest to come. Next came the Changanassary stock, from the Aliakkodu family during the period of Tippu Sultan's invasion of Malabar. The generous Maharaja Kama Varma received them hospitably and gave them the palace called Nīfālikkottāram of the Thekkumkur chieftain whose territories had been annexed to Travancore. As the family increased in numbers, they found it inconvenient to live under the same roof. One of the ladies, probably the eldest, remained at Changanassery along with the youngest, while the others migrated to convenient localities and settled down at Pallam, Pāliyakkara and Gramam. Later on two more branches left Changanassery and fixed their residences at Ananthapuram and Chemprol. About 1856 A. D. three more families, viz., those of Cherukol, Karaima and Vatakkematom immigrated from the Beypore Branch in north Malabar.

The Köil Thampurāns are all related by blood and observe birth and death pollutions like dāyādis. They are an exogamous community. The males marry into the families of Rājas or take Nāyar wives, while the females are married to Nampathiri Brahmans. There has, however, been a recent move to give their girls in marriage to the Rājas as well. They have the usual Brahmanical Samskāras. The thālikeṭṭu ceremony is observed, the string being tied by an Aryappaṭṭar or Nampūthiri, now generally the latter. The thāli-tier is not necessarily the spouse in actual life.

The Rajas live in nine families in Travancore, each known by the locality in which they reside—Panthalam, Panjar, Mavelikara, Ennakkad, Prayikkara, Thiruvalla,

Karthikappally, Mariyappally and Aranmula. The immigration of the Panthalam and the Funjar Raias. Raias who are representatives of the dynasty of Pandyan Kings took place more than eight hundred years ago. The Funjar chief is one of the most important noblemen in the State. The family owns extensive tracts of land in north Travancore, known as the Funjāt Edavaka. The original home of the remaining seven families was Kōlathunād in north Malabar. Their immigration into Travancore was in the main contemporaneous with the invasion of Malabar by Tippu Sultan. The first group came from the Puthiya Pally Kövilakam and settled down at Mavelikara. Next came the Pally Kovilakam, the Chenga Kövilakam and the Cheriya Kövilakam families. The last named family settled down at Aranmula and the other two at Thiruvalla, Kārthikappally and Mariyappally. Subsequently the main stock at Mavelikara became subdivided, one branch going to Ennakkad and another to Prāyikkara. Adoptions to the ruling family have been made from Māvēlikara and Ennakkād.

The Rājas like the Kōil Thampurāns have the prescribed Kshatriya Samskāras. Priestly functions are performed by Malayāli Brahmans. The thālikettu ceremony for girls is generally celebrated between the ages of seven and twelve, but there is no objection to performing it after the girl has attained puberty. The bride-groom is selected from among Kōil Thampurāns. The Kanyakādānam or the giving away of the bride is performed by the girl's uncle or brother. The males marry Kshatriya, Nāyar or Sāmantha women.

The word Thampan is a contraction of Thampuran. At one time the Tampans were rulers of small principalities. Allied to them are the Thirumulpads. The manners and customs of the Thampans and Thirumulpads are like those

the sacred thread at the age of sixteen.

Thampans and Thirumulpads.

The Namputhiri is the family priest. The thalikettu for the girls is performed between the seventh and the fourteenth years of age. The thali is tied by the Aryappattar and not by the Namputhiri, though it is the latter who recites the Vēdic hymns while the former goes through the ceremonial.

The non-Malayāli Kshatriyas in Travancore consist chiefly of Rājūs and Rājputs. The former speak Telugu.

They are believed to have come from Cuddappa and Bellary. The latter speak Hindustani and bear surnames like Rao, Singh, Rāju and Lāl. Both classes observe the makkathāyam law. Their numbers are very small.

The Kudumis are Konkana Śūdras. They are supposed to have accompanied the Konkanastha Kudumi. Brahmans from their original home. They (9.610)are found mostly in Parūr, Sherthala. Ampalapula, Kayamkulam and Quilon taluks. They are known as Muppans in some places and Idiyans in others. The Kudumis are divided into four clans the members of which interdine but do not intermarry. They are Vaishnavaites by religion but have accepted Bhagavathi also as their tutelary diety. They have their own priests but in some cases the Konkanastha Brahmans function for them. Early marriages are common. The marriage of girls is compulsory though it may take place even after puberty. Polygamy is allowed. Widows cannot remarry. The Kudumis are makkathāyis.

The Kuravas are a caste which at one time possessed considerable influence. Nanji Kuravan, one of their chiefs, is said to have ruled over a portion of Nanjanad

more than 700 years ago. The Kuravas are now a poor and backward community. They are allied to Kuravan. (87.071)the Kurumbas and Vetans (hill-men) and are met with in different parts of the State, chiefly in Chiravinkil, Kunnathur and Kottarakara taluks. are divided into three sub-divisions, viz., Kunta Kuravas, Kakka Kuravas and Pandy Kuravas. Those who live in the jungles are called the Malankuravans. The Kuravas are endogamous. Cross-cousin marriage is the prevalent form. Polygamy is common. Divorce is permitted with They follow a the previous consent of the elders. mixed system of inheritance. Like the Pulayas, the Kuravas form the chief agricultural labourers. In some places they also burn lime. In the hilly parts their women earn their livelihood by making baskets of reeds and wicker.

The Marakkans are a sea-fishing class. They are found chiefly in Karunagappally and Sherthala caluks.

They resemble the other Malayalis in their language, manners and customs.

The Marakkans of Karunagappally are makkathayis, while those of Sherthala follow the marumakkathayam law.

The Maravans found in Travancore are immigrants from the neighbouring British districts. They are scattered over the frontiers in the south, in Shen-kōtta and in the High Ranges. They are also known as Thēwans, Thalayans and Vanniyans. They are mostly agricultural labourers. Some are engaged as village watchers, their emoluments being paid by the cultivators. Polygamy is common among them and remarriage of widows is allowed. They are makkathayis. Their habits which were once predatory have become praceful.

The word Mukkuvan is supposed to be derived from Mung or Muk, meaning 'to dive'. It is also believed to be a corruption of Mukthavar, meaning a possessor of Muktham or pearl, which indicates that the Mukkuvans were originally engaged in pearl fishery. They dwell along the shores of the sea and the backwaters. There is a tradition that they originally came from Ceylon. The marriage tie is strong, but divorce is permitted. The system of inheritance followed is a mixture of makkathayam and marumakkathayam.

The Muthaliyārs are believed to have come from the Gangetic plain. They were known as Vēllāļar, Kāŕāļar,

Muthaliyār. Karkaḍal and Karkāṭṭār. They have been (972) an influential people with landed wealth, commanding also considerable success in trade.

The Muthathus occupy a higher place in the scale of caste than the Ampalavasis. They claim to be Brahmans, a claim not accepted in Travan-Mūťhathu. Their houses are called Illams. (646) In some of the temples the Mūthathu carries the idol in procession and performs certain other functions. In the Suchindram temple where the chief image alone is served by a Nampūthiri Brahman the Mūťhathus perform the service of the minors deities. The chief Mūthathu in that temple is styled Vattappally. At marriage and purification ceremonies in the Illams of Muthathus it is the Namputhiris who officiate as priests. The Muthathus are like the Nampūthiris in their customs and ceremonies. The eldest male member of the family was alone allowed to marry in the caste, the other members consorting with women of other castes. Marriage within the caste is making rapid strides. The Muthathus are makkathavis.

The Nadars are a class inhabiting the southern taluks of Travancore. Their mother tongue is Tamil though some of them speak Malayalam.

Nadar (Chānnān).

(233,982)

Bishop Caldwell considers them as immigrants from the northern coast of Ceylon.

They seem to have migrated into the southern taluks of Travancore either from or through the Tinnevelly district. The fact of their having been an important community in the past is borne out not only by such expressions as Nadar and Nadalvar found in some old stone inscriptions of Travancore, but also by numerous customs which are peculiar to them. They were good fighters, hardy and brave.

When a boy attains the sixteenth year, his beginning to use the head-cloth, Urumālkeṭṭu, and to carry a knife as a weapon of defence is an important ceremony. Girls are generally married after puberty, but infant marriages are not invalid. Polygamy appears to have been strictly prohibited from early times. In former days a man who married a second wife while the first was alive or had not been formally divorced, used to be outcasted along with his newly married wife. But that practice has gone out of use. Polyandry is unknown in the caste, nor is widow marriage permitted. The Nāḍārs are governed by the Mithākshara system of Hindu Law, the form of succession being strictly makkathāyam.

Their hereditary occupation is drawing toddy from the palmyra palm and making coarse sugar called jaggery. But many are agriculturists or landowners and are also engaged in trade. The number of Hindu Nadars has decreased considerably as a result of conversions to Christianity. Missionary work among the Nadar class has been remarkably successful.

Various theories have been started as to the origin of the Nayars. "A certain section of the population of south India is regarded ethnically as Dravidian and Turanian.

It has been suggested that both the Navar. Brahmans and the Nayars are of homo-(868,411) geneous origin and are a primæval Turanian race". * Others suggest that the Nairs are of Scythian origin, being the descendants of the Nagas-a tribe of snake worshippers. "In the cast of features, in habits and customs", says K. P. Padmanabha Menon, "many have noticed a close resemblance between the Nairs and the Bengalis." Dr. Thurston observes that "the original Nayars were undoubtedly a military body, holding land and serving as a militia". They are described by Pyrrad Laval as the "Lords of the land...the best soldiers in the world, and courageous, extremely skilful in the use of arms." Mr. Logan says that the Nayars came to be treated as outside the caste system altogether—a unique position which finds no parallel in the Hindu religion or political system elsewhere.

The political condition of the kingdom which underwent great changes since the coming of the English made fighting unnecessary. In 1832 Lieut. Col. E. Cadogan, Ag. Resident in Travancore, wrote to the Government of Madras: "Immediately after the war of 1809 the State of Travancore was deprived of its arms, ordnance and military stores, and the inhabitants completely disarmed." A century and more of peaceful and beneficent rule has wrought material changes in the character of the people. The Nayars have now become engrossed in agriculture, government service and the professions and callings. They are found in all the taluks of the State except Shenkotta, Thovala and Agastiswaram, where there is no indigenous Malayali population.

Several divisions are comprised in the general term Nayar. In the 1901 census as many as 116 sub-divisions

^{*} Native Life in Travancore, Matcer-

were returned under Nayar. But the main sub-divisions are only five. They are :- Kiriyathil Nayars, Illakkar, Swafupakkar, Padamangalakkar and Tamil Padakkar. Certain sub-castes which had been occupying a very inferior position in the scale are now being admitted to practical equality with others possessing acknowledged titles to higher position. The distinctive titles like Pillai, Thampi, Chempaka Kāman, Unnithan, Valiathan, Karthāvu, Kaimal, Kuruppu, Paņikkar, Mēnon, etc., do not connote difference in caste. Interdining was not permitted among the members of some of the sub-castes, but of late there has been considerable advance in that direction. Even intermarriages are now common and meet with the full approval of society. The fusion of sub-castes advocated by the late Mr. C. Krishna Pillai and his colleagues with the support of organisations like the Keraliya Nayar Samajam and the Navar Service Society is now an accomplished fact.

The law of inheritance was marumakkathāyam. But the Nāyar Regulation has made it virtually makkathāyam by making the widow and the children of a deceased Nāyar male heirs to his separate or self-acquired property. It also sanctioned the partition of Tharawāds, the shares being calculated per capita. The children now inherit the property both of the father and the mother. The Sambandham or marriage is always an affair carefully arranged and settled after consulting the wishes of both the parties. Divorce is of rare occurrence. It is now governed by the legislative provisions made for the purpose. The Nāyar women, in the event of separation from their husbands by divorce or death, are not prohibited to remarry.

The Nulayans, though they form a separate caste, are Nulayan. like the Arayans in most respects. Fishing (3,129.) is the time-honoured occupation, but a very large section of the community has taken to agriculture

and trade. Efforts are being made to weld the Arayans and the Nulayans into a homogen ous community. They are governed by the makkathāyam law.

The Pallans are a class of Tamilian agricultural labourers found chiefly in south Travancore and in the estates of the High Range division. They are supposed to have migrated from the Tamil districts. The early Tamil literature refers to the Pallans as Mallans. They were at one time a fighting class. They now live on the wages of labour. The Pallans are makkathāyis. A large number of them have entered the Christian faith.

The Pāṇans are of two classes, the Pānḍy Pāṇans and the Malayāḷi Pāṇans. The former are tailors by occupation and are found chiefly in Kōttār and Pāṇan.

(3,812)

Trivandrum. Jaffna is said to have been their original home.

The Malayāli Pāṇans are met with in the rural parts of central and north Travancore. They constitute an endogamous community which is divided into four clans. A woman remains in her own clan even after marriage and the children follow the clan of their mother. The sambandham form of marriage is now popular. Their traditional occupation is umbrella-making, but they are taking to all kinds of work. They are professional musicians, drummers and magicians in north Travancore. Both the Tamil and the Malayāli Pāṇans are makkathāyis. The remarriage of widows is not permitted among them.

The Paravans are a class of fishermen who collect bi-valve shells and make lime from them.

Paravan. (13,602)

Mat-making and rattaning are subsidiary occupations. In north Travancore the occupation of the males is tree-climbing, while the women

make a living by washing clothes. They are largely found in the taluks of Kalkulam, Vilavancode, Chirayinkil, Thiruvalla, Kottayam, Mūvāttupula and Mīnachil. Those living in the first two taluks are Tamilian in their language, manners, dress and ornaments. The Paravans of Thiruvalla are called Chākāmar and they wish to be designated Śākthar. Their customs differ in different places. The Paravans are makkathāyis except in Kalkulam and Vilavancode, where the mixed system of inheritance is followed. The remarriage of widows is common except in Kalkulam. Polygamy is tabooed in Mūvāttupula.

The Parayas form one of the aboriginal tribes of south India. They are found throughout Travancore but are more common in the southern taluks. Parayan. There are different local traditions about (70.684)their origin. In Vaikom they are believed to be the descendants of a high class Hindu who was degraded for eating meat, while in Kunnathunad and Muvattupula they claim to be the descendants of Pakkanar. Dr. Caldwell derives the word Parayan from 'Parai' or drum, as the caste supplies drummers. The caste is split up into several subdivisions which have different customs. Divorce is easily effected among them. The husband can send away his wife at his will and she on her part can dissolve the marriage tie by simply returning the thali. Polygamy is common. Widows are allowed to marry again except in south Travancore. The Parayas are makkathayis.

The occupation of a vast majority is agricultural labour. They are mostly attached to the soil as serfs. The manufacture of wicker-work, bamboo mats and cadjan umbrellas are other occupations. Tamil is the mother tongue of the Parayas in south Travancore and Malayalam of those in the northern taluks. Their houses are situated away from other residential quarters, outside the ordinary village limits, and are called Paracchēris. The Parayas of

the south call themselves Sāmbavar. An association started recently, namely the Adi Drāvida Mahā Sabha, is striving hard for the up-lift of these people.

The Pattaryans are found chiefly in Sherthala and Vaikom taluks in north Travancore and also in small num-

bers in Kalkulam taluk in the south. They Paţţāryan, * were included under the Saliyans in the Census of 1931. But there are several matters in which the two communities differ. Their ancestors are said to have been brought to Kēfaļa from Kumbhakoņan by one of the Perumals. The Pattaryas in north Travancore speak Malayalam, while those in the south speak Tamil. Early marriage of girls is more or less compulsory. Widows are not permitted to remarry. The Pattaryas are generally makkathayis. Unlike the Śāliyans, they are pure vegetarians. They are in some respects like the Śāliyans, but interdining or intermarriage between the members of the two communities is not allowed. Their occupation is silk-weaving, but many in north Travancore have taken to agriculture and trade.

The Pulayas are agricultural labourers. The name Pulaya is disliked by a large section of the community, particularly the converts to Christianity, who are adopting the name Chēramar, but many adhere to the old practice of calling themselves Pulayas. There are different accounts regarding the origin of the Pulayas. They are supposed by some to be the descendants of the aborigines who preferred slavery in the plains to freedom with starvation in the jungles. Others say that they were Dravidian immigrants. The tradition current among the Pulayas themselves points to their having been an influential community in the distant past.

Their number cannot be definitely ascertained as the Census Report of 1931 has clubbed them along with the Saliyans.

There are several minor divisions among them, which neither intermarry nor interdine. When a girl attains puberty, she is sent out of the main hut to a temporary shed where she is to stay for seven days and nights. At the time of delivery the woman is accommodated in a shed improvised for the occasion. Pollution is observed for seven days and after purification the shed is set fire to. Both thalikettu and the celebration of marriage are essential. The former generally takes place before the girl is ten years of age. Failure to perform it in time entailed loss of caste among some of the sub-divisions and the unmarried girl was given up to the charge of the priest whose property she But post-puberty marriages are common now. Divorce and widow remarriage are allowed. They follow either marumakkathavam or makkathavam.

The Pulayas are for the most part labourers and invariably stick to the estates on which they labour. With the help of the Government and of several prominent men of the advanced communities, they have been able to organise associations, such as the Sādhujana Paripālana Sangham, the Central Travancore Pulaya Samājam and the Chēramar Mahājana Sangham, to look after their common interests.

The Pulluvans were originally astrologers, medicine men, priests and singers in serpent groves (Kāvūs). They are found chiefly in the Quilon and Karunāgappally taluks. They are employed generally as agricultural labourers. Property descends from father to son.

The Reddis belong to an agricultural community which came to Travancore from the adjacent districts of Madura and Tinnevelly Their mother tongue is Telugu. They are found in Suchindram, Trivandrum, Quilon and Alleppey.

Their chief occupation is trade. They are Vaishpavites in religion and follow the makkathāyam law.

The Śaliyans, a weaving caste, are found mostly in Agastiśwaram, Kalkulam and Neyyattin-kara taluks. They speak Tamil. Polygamy is common but widow remarriage is not allowed. They are makkathayis.

The Saurashtras are a caste of weavers. They wear the sacred thread and claim to be Brahmans. Their original

home is said to have been near Gujerat. They were brought to Travancore by Asma Varma Mahārāja and Rāja Kesava Dās from Madura in the latter part of the eighteenth century and settled at Kōttār. They were weavers of silk formerly but took to cotton weaving after coming to Travancore. They speak a dialect which is a mixture of Hindi, Gujerathi and Telugu. Girls are married before puberty, cross-cousin marriage being the common form. Polygamy is permitted. The law of inheritance is makkathāyam.

The Thantans are tree climbers. In the south they are known as Uralis. The marriage customs and the rules of inheritance differ to some extent according to locality. Makkathayam is followed in Quilon and Karthikappally, marumakkathayam in Karunagappally and the mixed system in the other taluks.

The Valans are fishermen and boatmen who inhabit

Valans. the sea coast and the shores of back(21,172) waters in north Travancore. According to
tradition they were formerly Arayans. There are several

^{*} Their number cannot be definitely ascertained as the Census Report of 1931 has clubbed them along with Pattaryans.

clans among them. A man cannot marry in his own clan. Both thalikettu and sambandham forms of marriage are recognised. Polygamy, divorce and widow remarriage are allowed. They follow the mixed system of inheritance.

The Vāṇiyans claim to be Vaiśyas and style themselves as Chettiyārs. They are also known as 'Āyiravar' and 'Nagarat'hār'. The Vāṇiyans speaking Vāṇiyans.

(22,527)

Tamil wear the sacred thread. Widow marriage is not allowed. The Malayalam speaking Vāṇiyans do not wear the thread and resemble the other Malayālis in their manners and customs. With regard to these people it has been said, "castes like Ampattan, Vaniyan and Vannan were occupational guilds, consisting of people from various tribes, which had in course of time hardened into distinct castes".*

The Vannans are a Tamil speaking community. They are washermen by profession like the Mannans who, however, speak Malayalam. The Mannans are Vappān.† also called Pathiyans in some of the nor-(13,438)thern taluks. The usual occupation of both the classes is washing clothes, which is done mostly by the women. Among the Mannans the males are often exorci-Many of the Pathiyans earn their livelihood by tree climbing. They follow makkathayam except in the Karunagapally taluk. Among the Vannans girls are married before puberty. Divorce and widow marriage are allowed except in Parur and Muvattupula. The Vannans. Mannans and Pathivans were clubbed together at the last census. The common name of Varpavar is being adopted by the advanced sections in the three castes.

^{*} Srinivasa Iyengar, Tamil Studies, p. 67.

[†] Includes Mannans and Pathiyans.

The Vilakkithalayans, sometimes called Vilakkithala Nāyars, are barbers by occupation. They once belonged to the Nāyar community but became separated from it and formed a distinct caste on account of their calling. The Nāyar Regulation applies to them.

The Velans are found in many parts of Travancore. They fall into several exogamous clans. A woman retains her clan after marriage and her children (16,253) also belong to it. Polygamy and widow marriage are common. Makkathayam is followed in Köttayam, Muvattupula and Minachil taluks, the mixed system in the Chirayinkil taluk and marumakka thayam in the other talaks. Their occupations vary in different localities. Sorcery is their cast occupation. Burning lime, umbrella making and tree climbing are the other occupations.

This caste is found in most parts of the State. It consists of two sections, namely the Velans speaking Malayalam and the Kuśavans speaking Tamil.

Velans (Kusavans)
(12,377)
The latter who are mostly found in south Travancore and Shenkötta are believed to have come from the Tinnevelly district. They wear the sacred thread. They speak Tamil. As a class the Velans who speak Malayalam are makkathayis, though marumakkathayam is followed in Trivandrum. Both polygamy and widow marriage are in vogue. The traditional occupation of both the sections is pottery.

The Vellalas are divided into two main sections, namely, Saiva Vellalas and Nanjanad Vellalas. The former include Saiva Muthaliyars, Karaikkattu Vellalas and other occupational sub-castes. "The Vellalas of Nanjanad are said to have come from 109

Madura in the first century A. D. and those in Shenkotta with the Panthalam chiefs, while others found in Parar claim Valliyur and Palghat as their original homes." Their marriage laws are rather strict. A second marriage is allowed for a woman where the husband, having lived away from his wife for a long time owing to incompatibility of temper, marries a second time or where the first marriage is dissolved by a vidumuri (divorce deed). The Nānjanādians were originally makkathāyis. But they conformed to the usages of the Malayalis by adopting the marumakkathāyam law. Succession among the Nanjanad Vellalas is now governed by a Regulation enacted for the purpose. It is more or less like the Navar Regulation. Agriculture is their chief occupation; but they pursue other vocations besides. Their mother tongue is Tamil. The people of Nanjanad have always been famous for their capacity for united action in matters of public interest. Their military traditions are well-known.

The Vēļuthādathunāyars are washermen by occupation. They are believed to have been once within the Veluthādathu nāyar community. In course of time they became a distinct caste of inferior social status on account of their occupation. They wash clothes for the caste Hindus. They resemble the Nāyars in their manners and social customs. The Nāyar Regulation applies to them.

The Vēṭṭakkārans live in the villages near Thērūr in Agastīśwaram. They are supposed to have been hunters.

They offer worship to the Kannimār, a group of female deities whose figures are engraved on stones in certain places in the neighbourhood of their villages. They are not permitted to interdine or intermarry with high-caste communities like the Vellūlar.

The name Vīrāsaivar now applies to Panţārams, Vairāvis and Yōgīśwarans. The last two are the followers of the Murugi Mutt in Mysore, while Vířašaivar. the others follow the Śarankal Mutt of (19,555)Kumbhakonam. The latter Mutt had its representatives in various parts of Kerala, their descendants called Matavathis being found in different parts of the State. The Vairavis claim to have come from Madura to Suchindram, whence they spread to other taluks. The Vira-Saivas speak Tamil in south Travancore and Malayalam in the other parts of the State. In their dress and ornaments the Vairavi women resemble the Pandy Vellalas. The Yōgīśwarans are found largely in Nedumangād taluk. Most of them have taken to agriculture. The Virasaivas are makkathāvis.

The Yādavas or Idayans are found chiefly in Thōvāļa. Agasthīśwaram, Kalkuļam and Shenkōtta taluks. They are known as Paundans in Thōvāļa, Vadu-Yādavan. (8,457) gidayar in Shenkōtta and Kōnār in some other taluks. Those found in the southern taluks are believed to have immigrated from the Tamil districts in very early times. They are still Tamiliaus. Marriage is compulsory for girls in south Travancore, but not in Shehkōtta. Polygamy is not prohibited. Their traditional occupation is cattle-breeding and trading in milk and milk-products.

The aboriginal tribes now found in southern India were not originally Dravidians but blend in diverse proportion of super-imposed Negrito, Kolarian and Dravidian racial strata.* The earliest inhabitants of the country were probably the Negritos some of whom, when conquered by the Dravidians who came later, sought shelter in the hills and forests. They lived there

^{*} A. H. Keane, Introduction to the Cochin Tribes & Castes, Vol. I.

in complete isolation from the rest of the people. "They had no settled home; they were mostly nomadic hunters living on the flesh of wild beasts, natural roots and berries; some took to agriculture and raised food grains by cultivating fugitive forest lands. Till recently they had not come in contact with the people of the plains and had, therefore, preserved their primitive customs and habits more or less intact. But this is fast changing. By intercourse with civilised people they are themselves getting civilised, but in bodily vigour and numbers are fast dwindling down. They exhibit, in a marked degree, some of the primitive characteristics of the aborigines.". Short stature, low forehead, flat face and nose, and dark-complexion are among the distinct features of the hill tribes. It is difficult to say whether all these tribes belong to the same race or to different races. "Race is a sub-division of mankind having certain inborn physical traits in common." The usual tests are size, weight, shape of head, and the nasal index, the calculation being based on averages*.

"The tribesmen consider themselves the lords of the soil and look on the forest as their own. They seem to have a perfect mutual understanding as to boundaries, for we never hear of disputes and feuds among them".† As many as a dozen different tribes dwell in the reserved forests of the State, possessing several features in common as regards appearance, habitation, dress, food, occupation, and village organisation. They are:—

- Malappanţāram.
- 2. Muthuvān.
- 3. Mannān.
- 4. Ūrāli.
- 5. Paliyan.

- 6. Malappulayan.
 - (a) Kurumbappulayan.
 - (b) Karavalippulayan.
 - (c) Pāmbuppulayan.
- 7. Vizhavan (Malankudi).

^{*} Anthropology. A. A. Goldenweiser.

[†] The Land of the Conch Shell: Miss A. M. Blandford, p. 8.

- Vettuvan (Malavetan) 8.
 - (a) Valiyavētan.
 - (b) Cheruvētan.
 - (c) Chinkanni-vētan.
 - (d) Elichāthi-vētan.
- 9. Malankuravan. (Malayadiyār).
- Malayarayan. 10.
- 11. Ullatan.
- Kānikkāran. 12.

The only tribe living outside the forests are the Thantappulayas found in certain pakuthies of the Sherthala taluk.

The Malappantarams, the most primitive of the primitive tribes of Travancore, live scattered in the higher reaches of the Pampa and the Achankōil rivers and at Thalappara and Karumpally in the forests of the Shenkotta taluk. The Muthuvāns are found generally on the Kaṇṇan Dēvan hills in the High Range division, the Mannans in the Cardaniom hills to the south of the Panniyar river, the $\overline{\mathrm{U}}$ ralis in the forests of the Periyar, Vandanmet and Thodupula ranges, and the Paliyans in the Vandanmet range. Of the three groups of Malappulayans, the Kurumbappulayan lives at Pampar, Alampatti, Karumutti and Palampatti; the Karavalippulayan at Kumpittankuli, Pattatholivu, Pulikaravayal and Nachivayal; and the Pambuppulayan in the forests to the east of Chinnar. The Vizhavan lives in the Idiyara valley in north Travancore, the Vēṭṭuvan in the forests near Vadasērīkkara and the Malankuravan in various parts of the State. The Malayadiyar found in the Konni Reserve are identical with the Malankuravans. The Malayarayan is found in the forests of Changanāssēry, Mīnachil and Thodupula taluks; the Ullatan in the reserves of the Manimala Range; the Kāṇikkātan in the forests of Vilavancode, Neyyāttinkara and Nedumangād taluks; the Malavēṭan, the low country Kanikkaran, in the interior parts of Neyyattinkara and Nedumangad taluks; and the Thantappulayan in the coastal area in Sherthala taluk. Certain tribes like the Kanikkarans, Kuravans, Ullatans and Vetans are found both in the forests and in the plains. There is

no difference in social customs between the former and the latter.

All the tribes believe that they are immigrants from the neighbouring districts of Madura and Tinnevelly. traditions relating to the causes which led to their coming are cherished by them all. They speak of old chieftains and other leaders who led them to new ventures. The Kānikkār treasure the memory of Vīra Mārthandan Arayan who ruled over them assuming regal title. The Muthuvans of the Cardamom hills are said to have come from Madura to escape the dangers arising from internal dissensions after the advent of the Naiks. It is stated that they climbed the Ghats from the eastern side with their children carried on their backs. Hence they are called Muthuvans. An alternative theory is that while coming they bore the Goddess Mīnākshi on their back. The Mannans, it is said, were allured by the scope for hunting wild animals on the hills. The Paliyans aver that they came in quest of the means of livelihood believed to be abundant in an uninhabited country. The Uralis claim to have been the dependents of the king of Madura. The Vizhavans believe that they are the aborigines of the hills. The Thantappulayans have no tradition of immigration. It is likely that the two last mentioned tribes were already here when the others arrived.

The hill tribes show certain affinities with the Pulayas, Parayas, Kuravas and the Vetas in the plains. It is suggested by some writers that the ancestors of certain tribes living in the plains sought asylum in the mountain tracts in order, to escape serfdom. On the hills they were first nomadic hunters and later on nomadic agriculturists. After the opening up of the hills for cultivation and the provision of the means of communication the conditions of life have changed. The 'intrusion' of the civilised man is bringing about rapid changes in the "physical character, the economic condition, social customs and religious ideas of the tribes.... The progress of civilisation has not yet gone far enough to make them extinct. They are still there and many of them even now exhibit in a marked degree some of their primitive characteristics".

The physical characteristics exhibited by the various tribes are the result mainly of their environment. who live in high altitudes, the Muthuvans, Mannans, Palyans and Uralis, show a better development of physique. They are not so dark in complexion as those who live in the plains and in the lower ranges of the hills, like the Thantappulayans, Kānikkārans, Ullātans and Malayarayans. It may be observed that while the people inhabiting the hills are generally shorter than those in the plains, within the hilly regions those occupying higher altitudes are taller than their brethren in the lower ones. Malappulayans are the tallest among the tribes and the Malappantarams the shortest. Scarcity of food is also regarded as one of the causes of a shorter stature. Where the forests are abundant the hunter stage is prolonged and the progress of agriculture retarded as is seen in the case of the Malappantarams, the only tribe still remaining in the hunter stage in the State. Those who occupy the lower tracts grow ragi, rice or tapioca.

"The social organisation of the hill tribes is built on the foundation of endogamy. Primitive peoples attached the greatest importance to the rules of endogamy, and the punishments inflicted on any breach thereof were very severe. The tribe forms the entire circle within which a man must marry. But within the circle there are subdivisions, and persons belonging to each of these sub-divisions are prohibited from marrying within it. These are called endogamous groups or clans. The theory is that the members of a clan are descended from the same male ancestor and are, therefore, related. Marriage is not allowed within the clan,"

The customs and manners of the tribes are more or less similar. The rules of the clan are generally respected. Sexual morality is strict. Among the Kāṇikkār the punishment for adultery is death with torture. Bachelors are segregated in special habitations among some of the tribes and are not allowed to stray at night. In the same way unmarried girls are obliged to stay in sheds under the care of matrons. But laxity is not specially discountenanced among such tribes as the Paliyans and the Vizhavans.

The tribes observe pollution with more vigour than even the highest of the Hindu castes, the women being constrained to live in separate huts during their menstrual periods and at the time of child-birth. Among some of the tribes during the pollution period the husband remains indoors without doing any work.

Cross-cousin marriage is the general practice. Sisters are exchanged in matrimony. Among the Ufalis a man who has no sister has but a faint chance of getting a wife. Marriage by capture and marriage by service are also permitted among the Muthuvans and the Mannans. Polygamy is allowed and polyandry is not infrequent. Divorce is not forbidden. Widow marriage is permitted. There is no uniform rule with regard to the age of marriage. Among Malappanţārams, Uralis, Vēttuvans, and Kanikkarans it may take place before or after puberty. Anti-puberty marriage is the rule among the Ullatans and the Vizhavans. Among others post-puberty marriage is prevalent. Most of the tribes bury the dead. The law of inheritance is not uniform. What generally obtains is makkathayam. In many cases what belongs to a deceased man is divided between sons and nephews equally. Marumakkathayam is also met with. Sometimes different clans forming the same tribe follow different systems of inheritance.

The religion of the hill tribes presents a great diversity. They worship nature, concentrating their devotion on various objects large and small, animate and inanimate. The

crests of certain hills are common objects of mention. Sun worship and serpent worship mark the next stage which in the process of evolution yields to the worship of spirits and forest gods, passing smoothly and sometimes unconsciously to the worship of the gods of the Hindu pantheon like Sastha and Subrahmonya and the female forms such as Kali, Minakshi and Mariyamma. The tribes live in small groups of 10 to 15 families, each settlement being an independent unit. In some there are councils of elders besides the headmen. Very often Panchayats are convened to decide questions of discipline. "The authority of the Panchayat extends over breaches of marriage and petty thefts."

The total number of people in all the tribes together is 128,838. Of these 115,151 are Hindus, 10,780 are Christians, and 2,907 belong to the tribal religions.*

The government have framed certain rules for the treatment and management of the hill tribes. Each settlement has a headman who may be either hereditary or elected. A headman who is guilty of dereliction of duties is removed by the tribesmen at the instance of the Divisional Forest Officer. The hillmen are permitted to cultivate land, tax-free within the government forests and reserves to the extent of five-eighth of an acre per head for every member of a settlement above three years of age. Provision is made for rotation. They have the right to fell and use any timber (other than royal or reserved trees), free of charge for domestic and agricultural purposes. They are also permitted to use bamboos, reeds and canes for making petty articles for sale, subject to certain rules. They are to assist the police and the revenue officers of the government in preventing crimes and detecting offenders. The hillmen residing in the forests and reserves shall have their names registered in the office of the Divisional Forest Officer. They cannot leave the settlements

^{*} For the distribution of the tribes among the different religions, see the table on p. 388 of the Travancore Gensus Report, 1931.

without the permission of the headmen. The settlements are permanently fixed; and shifting from place to place is not allowed except for temporary purposes, with the special sanction of the Divisional Forest Officer, for example, in cases of scarcity of water, out-break of epidemics, etc.

Socio-religious groups.

Before concluding this chapter it is necessary to give a short account of certain classes which bear distinctive marks and form for certain purposes virtually isolated social groups. The Christians and the Muslims, for example, have no rules of caste and the rules of social intercourse among members of the various sub-groups are more flexible than those among the Hindus. But so great is the force of tradition and habit that they also respect certain customs which make for exclusions. Frequently they are found to use the term 'jathi' though in a peculiar sense. This may have been due to the admission of converts from the lower classes of Hindus, within the church. The older Christians, the descendants of converts from the higher castes, show a desire, if not an unbending determination, to maintain their social precedence. Even at the present day the gulf between the Northists and the Southists has not been bridged. It is possible that the notion of caste precedence was retained as a relic of the past when the converts were Hindus in faith. It may also be that they have been doing so following the example of their Hindu neighbours. The fact remains that there are clear-cut rules of caste superiority respected by most sections of Christians even at the present day.

The Syrian Christians are perhaps the most exclusive.

They claim to have come from Syria. It is true that several families migrated to Kēraļa from the beginning of the Christian era, though their numbers might have been necessarily small. But it may be predicated that the bulk of the Syrian Christians must have

descended from the Hindus. The statement of William Crooke that the Syrians and other sects have sprung from converts, as a rule from the lower strata of the community does not appear to be correct. Conversion was, no doubt, a means adopted by certain classes to raise their social position; for, while members of the inferior castes were regarded as unapproachable, the stigma did not attach to converts to Christianity. In a few generations they became quite as respectable as others. There are many Syrian Christian families which maintain that their ancestors were either Nampūthiris, Nāyars, or others pretty high in the heirarchy of castes. In the old days they also supplied fighting men in times of war.

The Latin Catholic community is a heterogeneous body composed mainly of the Aññuttikkar, Anglo-Indians, Nāḍārs, Vellālas, Mukkuvans or Araśar, Paravas or Bharathars, Parayas, and Pulayas or Chēramar. The Aññuttikkar and the Elunuttikkar affirm that there are among them descendants of the ancient St. Thomas Christians. It would appear that they became latinised in the 15th century through Portuguese influence.

The numbers of the important Christian castes are given in the Census Report for 1931 as follows.

| one consus respect for recent | |
|-------------------------------|---------|
| Nadar | 168,573 |
| Chēramar (Pulayan) | 157,813 |
| Sambavar (Parayan) | 71,680 |
| Mukkuvan | 30,539 |
| Catholic Arasar | 22,560 |
| Bharathar | 8,669 |
| Kuravan | 8,158 |
| Aiyyanavar | 6,414 |
| Arayan | 3,620 |
| Vannan | 2,589 |
| Ilavan | 2,311 |
| Pallan | 2,225 |
| T. Off 211 | • |

| Chakkaravar | | 2,108 |
|---------------|-------|---------|
| Vētan | | 2,000 |
| Kēraļamuthali | | 1,582 |
| Kāvathi | | 1,403 |
| Marakkān | | 1,301 |
| Vellālān | | 1,078 |
| Others | | 8,764 |
| | Total | 503,387 |

The Muslims in Travancore respect brotherhood in religion. There are genuine Arab and Persian elements but the majority are converts. Members Muslims. of castes occupying positions of social inferiority among the Hindus must have embraced Islam for temporal as well as spiritual reasons. But forced conversions have been rare in Travancore. The Muslims are as particular to maintain race and family prestige as any other community. In practice intermarriage is restricted by various considerations. The Muslims have been a trading community from the beginning of their settlements. From the earliest days they gave willing allegiance to the Malabar rulers in whose dominions they lived. Numbers of them have served in the Travancore army. The bulk of the Muslim population are Sunnis, the number of Shiahs being very small. The Malabar and Tamil Mussalmans together constitute as much as 96.5 per cent, of the total Muslim population of Travancore. They are classified as shown below :--

A. Shiah

| | Bo | ra | | 1,319 |
|----|---------|-----------------|-------|-------|
| В. | Sunni | | | , |
| | 1. ' Ku | tch Memon | | 348 |
| | 2. Dal | khani Mussalman | | 7,188 |
| | i. | Mughal | 31 | |
| | ii. | Pathan | 5,033 | |
| | iii. | Saiyad | 858 | |
| | iv. | Sheik | 1.266 | |

| 3. | Ma | labar Mussalmar | ι . | 249,665 |
|----|------|-----------------|---------|---------|
| | i. | Jōnakan | 114,005 | |
| | ii. | Mēťhan | 134,746 | |
| | iii. | Thangal | 914 | |
| 4. | Tar | nil Mussalman | | 91,109 |
| | i. | Labbai | 10,421 | |
| | ii. | Rowther | 40,210 | |
| | iii. | Thulukkan | 40,478 | |
| 5. | Uns | specified | | 3,645 |
| | | То | tal | 353,274 |

There are some Jews in Travancore but their number is very small, being only 298. It is believed that their settlement in Malabar began in the 1st century A. D. Cranganore was the chief place of their trade. In Travancore the Jews are practically confined to the taluk of Paiūr. They are probably immigrants from Cochin.

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Keith, A.

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Mateer, Rev.
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